

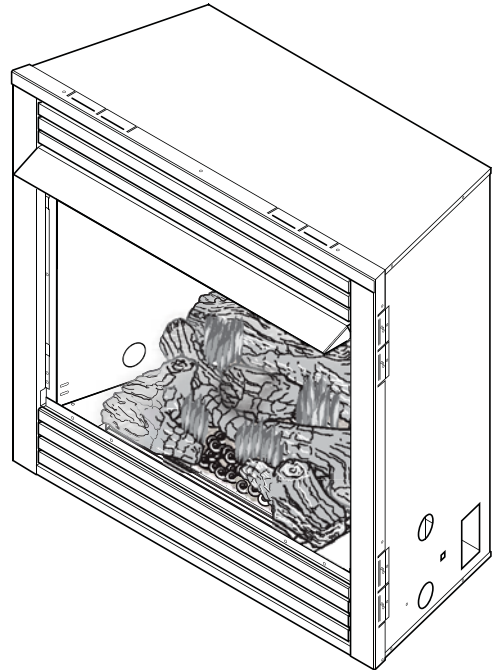
MONESSEN

HEARTH SYSTEMS

VENT-FREE FIREPLACE SYSTEMS INSTALLATION AND OPERATING INSTRUCTIONS

MODELS:

DFS32NVC, DFS32PVC
DFS36NVC, DFS36PVC
DFS42NVC, DFS42PVC



This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to page 10.

WARNINGS

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

READ AND SAVE THESE INSTRUCTIONS

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IMPORTANT SAFETY INFORMATION

INSTALLER

Please leave these instructions with the appliance.

OWNER

Please retain these instructions for future reference.

IMPORTANT

Read these instructions carefully before installing or trying to operate this vent-free gas heater.

WARNING

- Any change to this heater or its controls can be dangerous.
- Improper installation or use of the heater can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.
- Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.
- Do not use a blower insert, heat exchanger insert or other accessory, not approved for use with this heater where applicable.

1. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
2. Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.
3. Young children should be carefully supervised when they are in the same room with the appliance.
4. Do not place clothing or other flammable material on or near the appliance.
5. Any safety screen or guard removed for servicing an appliance, must be replaced prior to operating the heater.
6. Installation and repair should be done by a qualified service person.
7. To prevent malfunction and/or sooting, an unvented gas heater should be cleaned before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulating air passageways be kept clean.
8. **CARBON MONOXIDE POISONING:** Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Have the heater serviced as it may not be operating properly.
9. The installation must conform with local codes or, in the absence of local codes, with the **National Fuel Gas Code, ANSI Z223.1/NFPA54**.
10. This unit complies with ANSI Z21.11.2 Unvented Heaters.
11. Do not install the heaters in a bathroom or bedroom.
12. Correct installation of the ceramic fiber logs, proper location of the heater, and annual cleaning are necessary to avoid potential problems with sooting. Sooting, resulting from improper installation or operation, can settle on surfaces outside the fireplace. See log placement instructions for proper installation.
13. Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into fireplace. Do not place a blower inside burn area of firebox. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur.
14. **Caution:** Candles, incense, oil lamps, etc. produce combustion byproducts including soot. Vent-free appliances will not filter or clean soot produced by these types of products. In addition, the smoke and/or aromatics (scents) may be reburnt in the vent-free appliance which can produce odors. It is recommended to minimize the use of candles, incense, etc. while the vent-free appliance is in operation.
15. This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. See page 10.
16. Keep room area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

Continued on page 4

IMPORTANT SAFETY INFORMATION

Continued from page 3

17. Unvented gas heaters are a supplemental zone heater. They are not intended to be the primary heating appliance.
18. Unvented gas heaters emit moisture into the living area. In most homes of average construction, this does not pose a problem. In houses of extremely tight construction, additional mechanical ventilation is recommended.
19. During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance; possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

The initial break-in operation should last two to three hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in period will be slight and will disappear with continued use.
20. Input ratings are shown in BTU per hour and are for elevations up to 2,000 feet. For elevations above 2,000 feet, input ratings should be reduced 4 percent for each 1,000 feet above sea level. Refer to the National Fuel Gas Code.
21. The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).
22. The appliance must be isolated from gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).
23. Do not use this room heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
24. Never burn solid fuels in a fireplace where a unvented room heater is installed.
25. Always have a fireplace screen in place when the appliance is in operation and, unless other provisions for combustion air are provided, the screen must have an opening(s) for induction of combustion air.

**THIS APPLIANCE MAY BE
INSTALLED IN AN AFTERMAR-
KET, PERMANENTLY LOCATED,
MANUFACTURED (MOBILE)
HOME, WHERE NOT PROHIB-
ITED BY LOCAL CODES.**

**THIS APPLIANCE IS ONLY FOR
USE WITH THE TYPE OF GAS
INDICATED ON THE RATING
PLATE. THIS APPLIANCE IS
NOT CONVERTIBLE FOR USE
WITH OTHER GASES.**

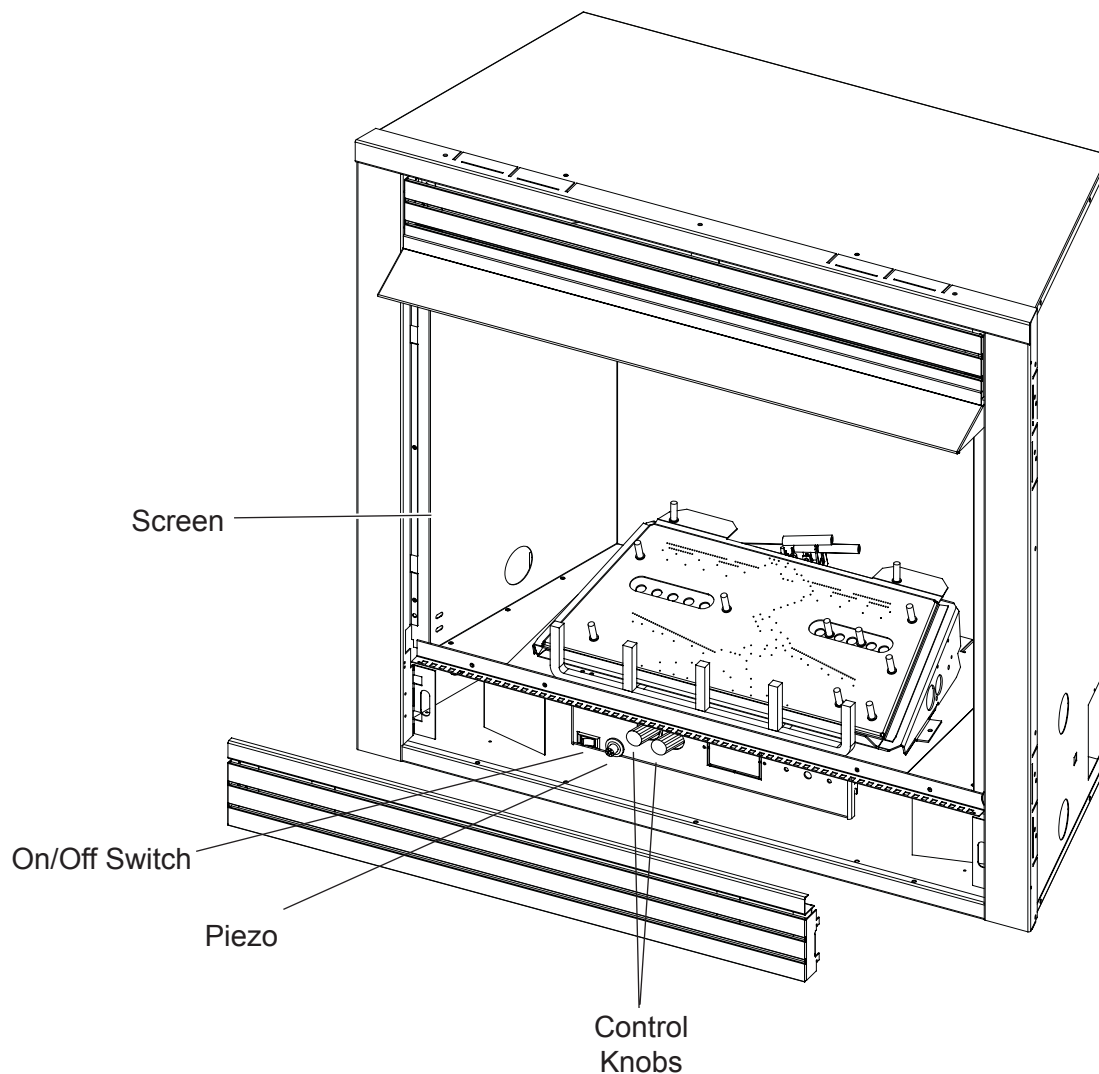


Figure 1 - Access to Controls

This vent-free fireplace must be mounted on the floor or on the optional fireplace hearth.

OPERATION

This unvented gas heater requires no outside venting and burns cleanly with high heating efficiency.

This zero-clearance unvented gas heater can be installed against (or recessed into) any wall that is accessible to a gas line.

PRODUCT FEATURES

NATURAL GAS

Milli-Volt Pressure

Regulator Pressure Setting: 3.5" w.c.

Pilot Regulator: 3.5" w.c.

Gas Inlet Pressure: Max. 10 1/2" w. c.
Min. 5" w.c.

Model Number	Control	Gas Rate	
		Max BTU/Hr	Min BTU/Hr
DFS32NVC	MILLI-VOLT	38,000	26,000
DFS36NVC	MILLI-VOLT	38,000	26,000
DFS42NVC	MILLI-VOLT	38,000	26,000

PROPANE/LPG

Note: An external regulator is required to reduce supply pressure to a maximum of 13" w.c.

Milli-Volt Pressure

Regulator Pressure Setting: 10" w.c.

Gas Inlet Pressure: Max. 13" w.c.
Min. 11" w.c.

Model Number	Control	Gas Rate	
		Max BTU/Hr	Min BTU/Hr
DFS32PVC	MILLI-VOLT	34,000	26,000
DFS36PVC	MILLI-VOLT	34,000	26,000
DFS42PVC	MILLI-VOLT	34,000	26,000

IGNITION CONTROLS

Piezo ignitor allows ignition of the pilot without the use of matches or batteries.

Milli-Volt control has four (4) positions:

- OFF** - All gas to the gas logs is shut off at the valve.
- IGN** - Valve position to light/maintain a standing pilot.
- ON** - Valve position to turn ON/OFF log set with remote switch/thermostat.
- LOW/HI** - Variable position to control flame height (heat output). Both front and rear burners are in operation to provide realistic glow and yellow flame.

PILOT

The gas log heater is fitted with a specially designed safety pilot light (ODS assembly) which senses the amount of oxygen available in the room and shuts the gas log heater off if the oxygen level begins to drop below a satisfactory level. The pilot can only be relit when adequate fresh air is available.

THERMAL GENERATOR

The milli-volt gas log pilot is fitted with a milli-volt generator to provide power for remote activation.

GETTING STARTED

MAKE SURE YOU HAVE RECEIVED ALL PARTS:

Check your packing list to verify that all listed parts have been received. You should have the following:

- Unvented gas log grate/burner assembly
- Installation/operating instructions
- Ceramic fiber logs
- Rock wool
- Plastic bag containing crushed volcanic rock
- Trim kit
- Canopy and five (5) mounting screws

The milli-volt controlled version of this heater is the only style designed to be operated with optional devices for ON/OFF functions. The following options may be used with the milli-volt controlled heater. These options are not packaged with the log set.

- Hand held remote with receiver
- Wall switch with 15' wire
- Wall thermostat with 15' wire
- Hand held thermostat remote with receiver

WARNING

- **Gloves are recommended when handling ceramic fiber logs to prevent skin irritation from loose fibers. Logs are fragile — handle with care.**

Carefully inspect the contents for shipping damage. If any parts are missing or damaged, immediately inform the dealer from whom you purchased the appliance. **Do not attempt to install any part of the appliance unless you have all parts in good condition.**

WHAT YOU WILL NEED FOR INSTALLATION:

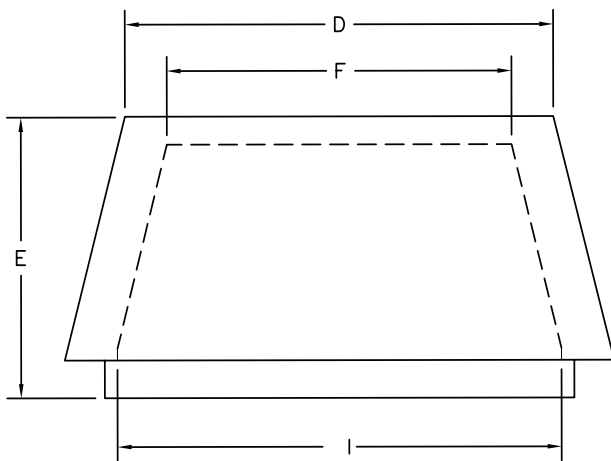
You must have the following items available before proceeding with installation:

- External regulator (for propane/LPG and 1/2 lb. natural gas systems only)
- Piping which complies with local codes
- Pipe wrench or appropriate size crescent wrench set
- Pipe sealant approved for use with propane/LPG (Resistant to sulfur compounds)
- Sediment trap
- Manual shutoff valve
- Tee joint.
- Phillips head screwdriver

GENERAL INSTALLATION INFORMATION

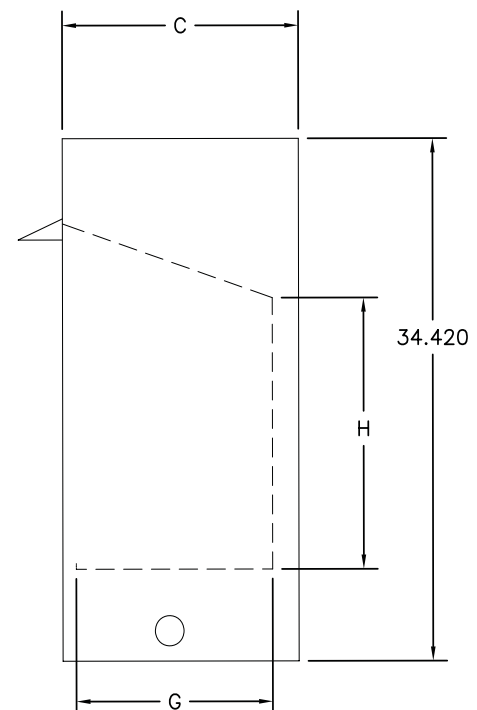
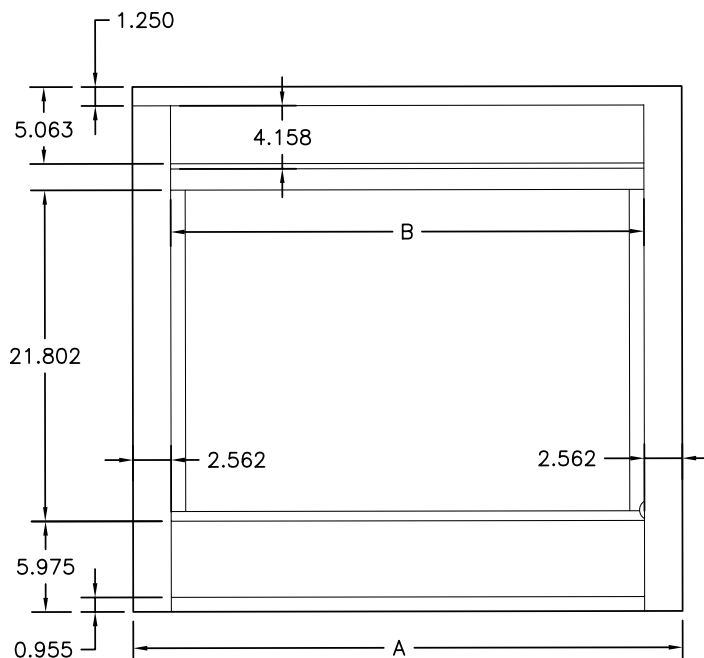
In planning the installation for the fireplace it is necessary to determine where the unit is to be installed and whether optional accessories are desired. Gas supply piping should also be planned. The following steps represent the normal sequence of installation. Each installation is unique, however, and might require a different sequence.

1. Position fireplace in desired location. Refer to the "Location of Fireplace" and "Clearances and Height Requirements," and "Firebox Framing" sections found in this manual. **Note: Be sure all packing material has been removed from underside of the unit.**
2. Install canopy and logs per instructions found in this manual. The canopy **MUST** be installed for safe operation of the unit.
3. Field wire main power supply to units with fan kit. Refer to the "Electrical Section" found in this manual. (Electrical connections should only be performed by an experienced, licensed certified tradesman).
4. Install optional ON/OFF kit on units with milli-volt control. Refer to installation instructions included with the kit and also refer to the "Electrical Wiring" section found in this manual.
5. Plumb gas line. Refer to the "Connecting the Gas" section found in this manual. (Gas connections should only be performed by an experienced, licensed / certified tradesman).
6. Complete finish wall material and/or surround.



	DFS32NVC DFS32PVC	DFS36NVC DFS36PVC	DFS42NVC DFS42PVC
A	37"	41"	47"
B	32"	36"	42"
C	16"	18"	18"
D	29"	32"	38"
E	18 ⁵ / ₈ "	20 ⁵ / ₈ "	20 ⁵ / ₈ "
F	23 ³ / ₈ "	27 ³ / ₈ "	33 ³ / ₈ "
G	13 ¹ / ₄ "	15 ³ / ₄ "	15 ³ / ₄ "
H	18"	17 ⁵ / ₈ "	17 ⁵ / ₈ "
I	29 ⁷ / ₈ "	34"	40"

Figure 2 - Firebox Dimensions with Screen and Log Sets



GENERAL INSTALLATION INFORMATION

CODES

Adhere to all local codes or, in their absence, the latest edition of THE NATIONAL FUEL GAS CODE ANSI Z223.1 or NFPA54 which can be obtained from:

American National Standards Institute, Inc.

1430 Broadway
New York, NY 10018

or

National Fire Protection Association, Inc.

Batterymarch Park
Quincy, MA 02269

WARNING

Do not install the heater:

- **Where curtains, furniture, clothing, or other flammable objects are less than 42" from the front of the heater.**
- **In high traffic areas.**
- **In windy or drafty areas.**

ADEQUATE COMBUSTION AND VENTILATION AIR

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

The National Fuel Gas Code, (ANSI Z223.1/NFPA54), defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 BTU per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space, and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 BTU per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

UNUSUALLY TIGHT CONSTRUCTION IS DEFINED AS CONSTRUCTION WHERE:

- a) walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm (6 x 10¹¹ kg per pa/sec-m²) or less with openings gasketed or sealed;
- b) weather striping has been added on openable windows and doors, and
- c) caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

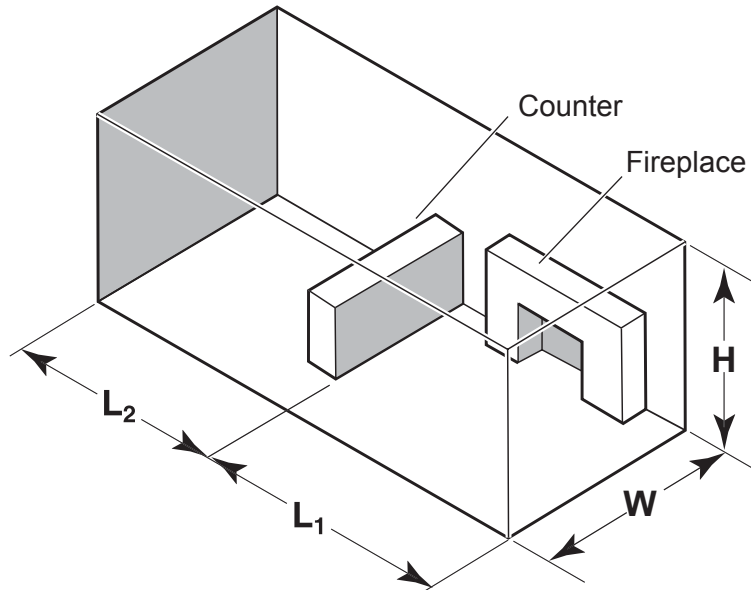


Figure 3 - Example of a Large Room with 1/2 Wall Divider

The following formula can be used to determine the maximum heater rating per the definition of unconfined space:

$$\text{BTU/Hr} = \frac{(L_1 + L_2) \text{ Ft} \times (W) \text{ Ft} \times (H) \text{ Ft}}{50} \times 1000$$

Consider two connecting rooms with an open area between, with the following dimensions:

$$L_1 = 15\frac{1}{2} \text{ Ft.}, L_2 = 12 \text{ Ft.}, W = 12 \text{ Ft.}, H = 8 \text{ Ft.}$$

$$\text{BTU/Hr} = \frac{(15\frac{1}{2} + 12) \times (12) \times (8)}{50} \times 1000 = 52800 \text{ BTU/Hr}$$

If there were a door between the two rooms the calculation would be based only on the room with the heater.

$$\text{BTU/Hr} = \frac{(15\frac{1}{2}) \times (12) \times (8)}{50} \times 1000 = 29760 \text{ BTU/Hr}$$

WARNING

If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSI Z223.1/NFPA54, Section 5.3 or applicable local codes.

GENERAL INSTALLATION INFORMATION

REMOVING SCREEN

Remove fireplace screen frame panel by pushing screen frame panel up and out. *See Figure 4.*

WARNING

Do not operate the unit without the screen frame panel and canopy installed.

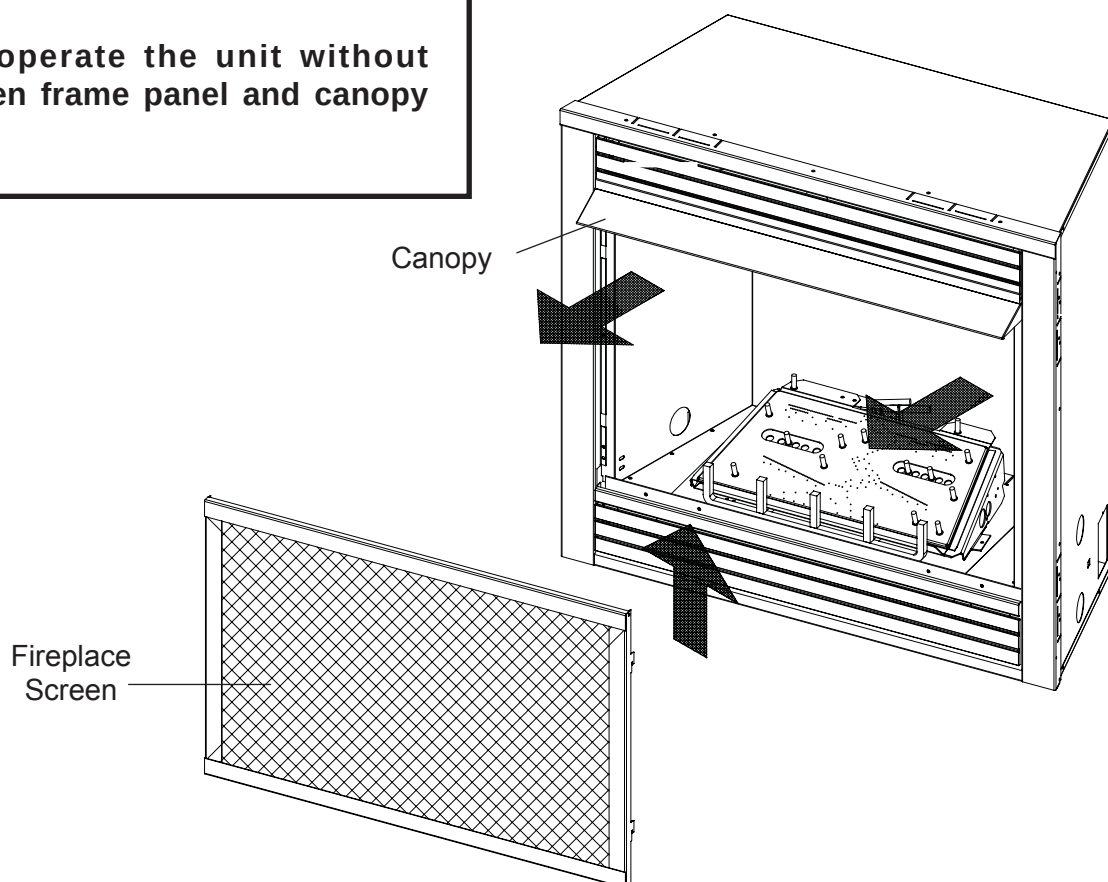


Figure 4 - Removing Fireplace Screen Frame Panel

NOTE: Fireplace screen must be removed to access log box and to install canopy.

INSTALLING CANOPY

1. Remove the fireplace screen as described in the previous section.
2. Align the canopy with the holes in the top frame. *See Figure 5.*
3. Secure screws as shown. *See Figure 5.*
4. Install and tighten side screws. Make sure the canopy is level and secure. Install the fireplace screen.

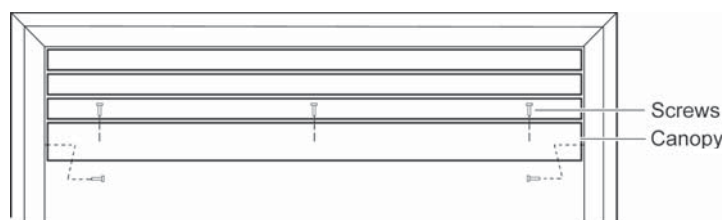


Figure 5 - Canopy Installation

LOCATION OF FIREPLACE

Carefully select the best location for installation of your unvented fireplace. The following factors should be taken into consideration.

- Clearance to side wall, ceiling, woodwork and window or other combustibles. Refer to “Clearances and Height Requirements” section on page 14. Minimum clearances to combustibles **must be maintained**.
- Location must not be affected by drafts caused by kitchen exhaust fans, ceiling fans, return air registers for forced air furnaces / air conditioners, windows or doors.
- Installation must provide adequate ventilation and combustion air.
- **DO NOT INSTALL THIS MODEL IN A BEDROOM OR BATHROOM.**
- Location should be out of high traffic areas and away from furniture and draperies due to heat from firebox.
- Never obstruct the front opening of the unvented fireplace or restrict the flow of combustion and ventilation air.
- Minimize modifications to existing construction. *See Figure 6* below for location suggestions.
- Do not install in the vicinity where gasoline or other flammable liquids may be stored. The unvented firebox must be kept clear and free from the combustible materials.

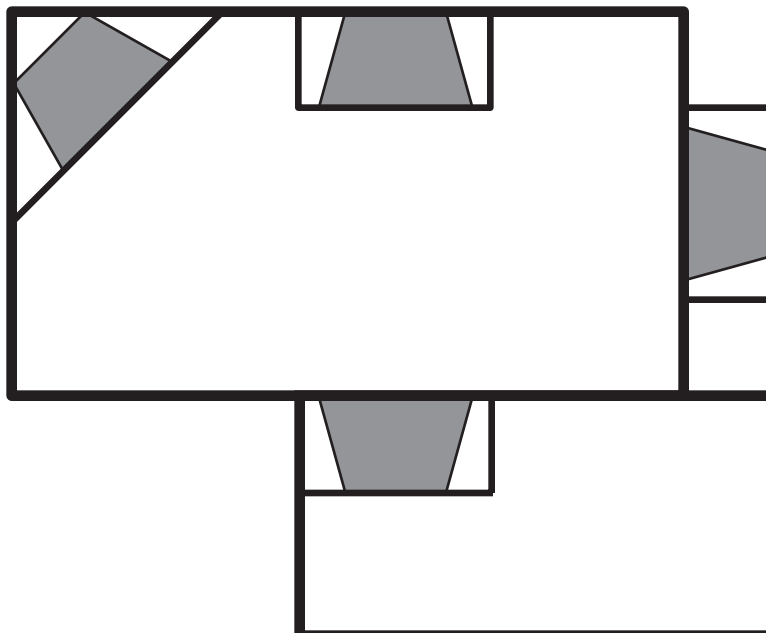


Figure 6 - Suggested Locations

CLEARANCES AND HEIGHT REQUIREMENTS

WARNING

The dimensions shown in Figures 7 and 8 and defined in the fireplace manufacturer's instructions are *minimum clearances* to maintain when installing this heater. Left and right clearances are determined when facing the front of the heater.

Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

Sidewall and ceiling clearances: The clearance from the inside of the appliance to any combustible adjacent wall should not be less than 9". See Figure 7.

Ceiling clearance: The ceiling must be at least 42" from the top of the firebox opening. See Figure 7.

Back wall clearance: The appliance may be placed against a combustible back wall.

Floor clearance: The fireplace may not be installed onto any combustible flooring material, such as carpeting, vinyl or tile without the hearth or a minimum 22 GA (0.030") metal or a minimum 1/2" wooden base covering the entire width and depth of the base. Combustible material must be installed at least one inch away from the front face of the unit.

Mantel clearances: The canopy supplied with the unit must be installed. If a combustible mantel is installed. It must meet the clearance requirements shown in Figure 8.

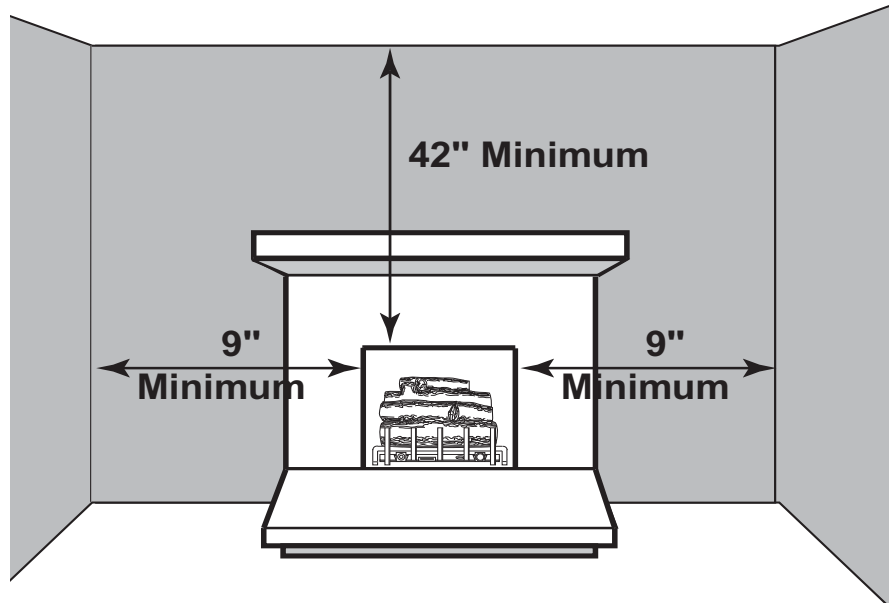


Figure 7 - Sidewall and Ceiling Clearances

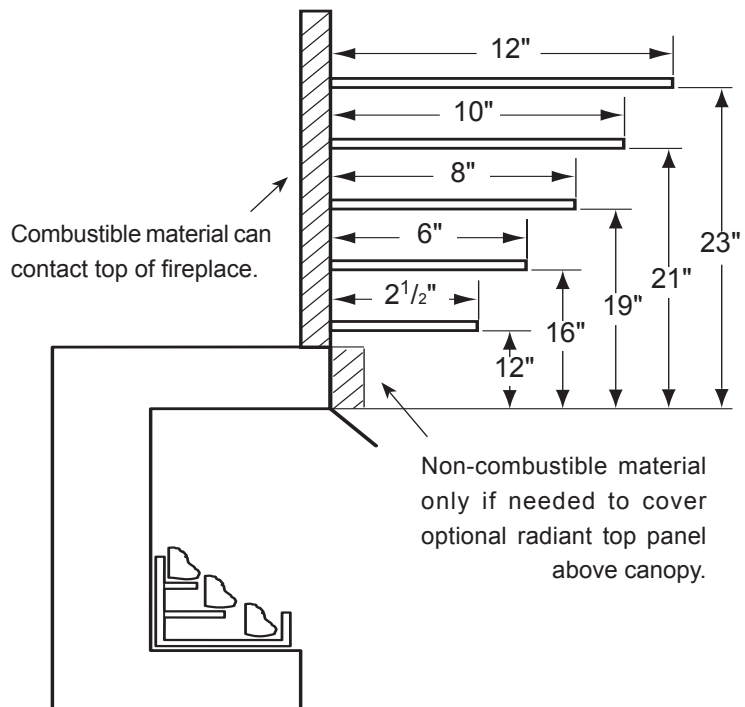


Figure 8 - Minimum Mantel Clearances

FIREPLACE FRAMING

If unit is to be “built in,” fireplace framing can be built before or after the appliance is set in place. **BE SURE THAT ALL PACKING MATERIAL HAS BEEN REMOVED FROM THE UNDERSIDE OF THE UNIT PRIOR TO SETTING THE FIREBOX IN PLACE.** Construct fireplace framing following *Figures 9 through 12*. Refer to *Figure 2 on page 9* for fireplace dimensions. The framing headers may rest directly on top of the firebox.

The fireplace may be installed directly on a combustible floor or a raised platform of an appropriate height. Do not place fireplace on carpeting, vinyl, tile or other soft floor coverings. It may, however, be placed on flat wood, plywood, particle board or other hard surfaces. Be sure fireplace rests on a solid continuous floor or platform with appropriate framing for support and so that no cold air can enter from under the firebox.

Anchor fireplace to the side framing members using optional nailing flange kit. See installation instructions included with the kit.

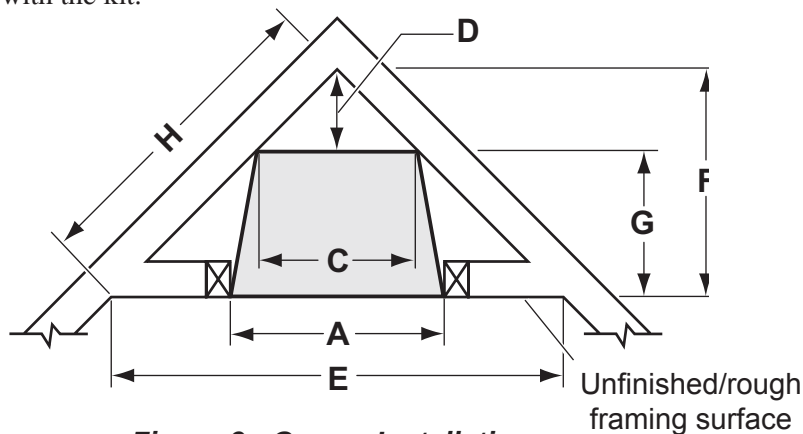


Figure 9 - Corner Installation

	DFS32NVC DFS32PVC	DFS36NVC DFS36NVC	DFS42NVC DFS42NVC
A	37¼"	41¼"	47¼"
B	35"	35"	35"
C	29"	32"	38"
D	14⅞"	16⅜"	19⅞"
E	61¾"	68⅞"	74⅞"
F	30⅞"	34½"	37½"
G	15½"	17½"	17½"
H	43¾"	48¾"	53"

WARNING Optional bottom radiant panel cannot be covered. Optional top radiant panel can be covered as shown in Figure 8.

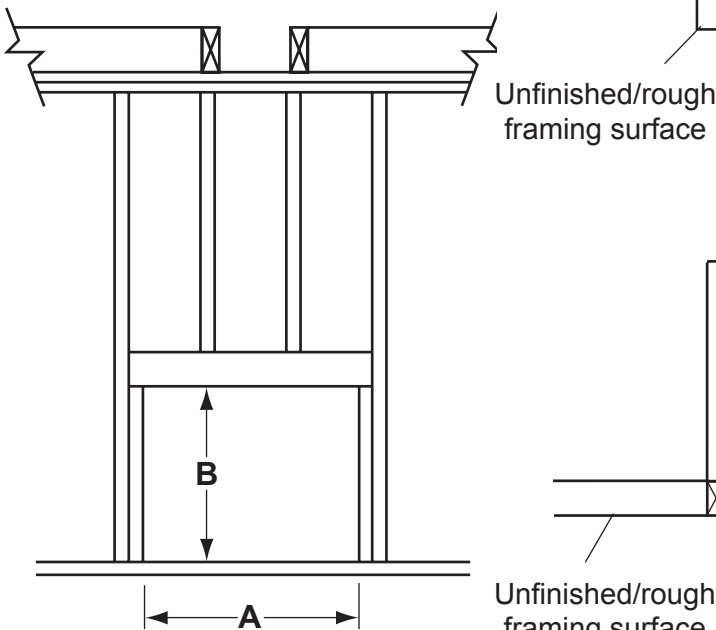


Figure 11 - Stud Location

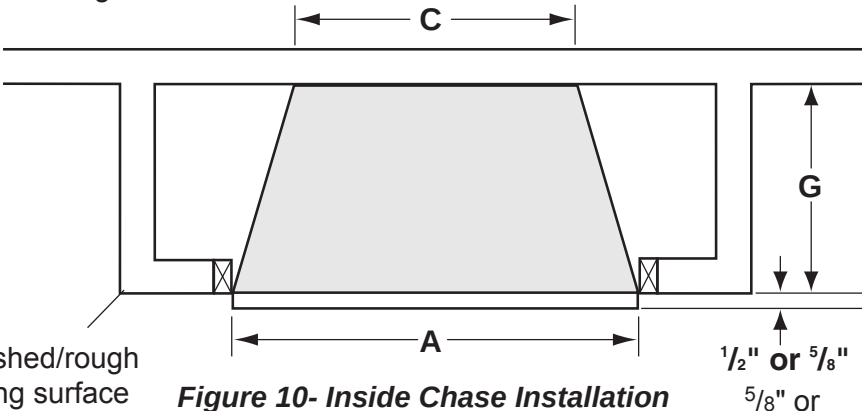


Figure 10- Inside Chase Installation

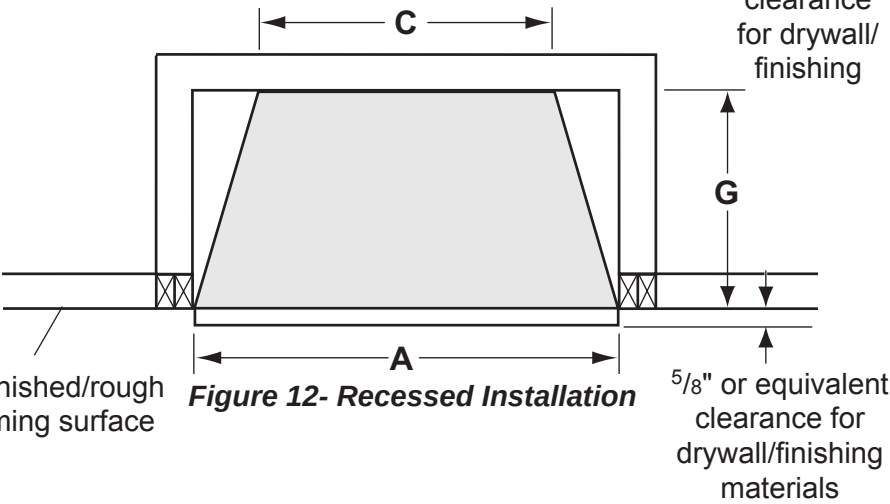


Figure 12- Recessed Installation

When finishing a custom cabinet, mantel, or other built-in enclosure, the opening size to accommodate the fireplace with trim installed is as follows:

	DFS32NVC DFS32PVC	DFS36NVC DFS36PVC	DFS42NVC DFS42PVC
K	37 $\frac{7}{8}$ "	41 $\frac{1}{8}$ "	47 $\frac{7}{8}$ "
J	35 $\frac{7}{8}$ "	35 $\frac{5}{8}$ "	35 $\frac{7}{8}$ "

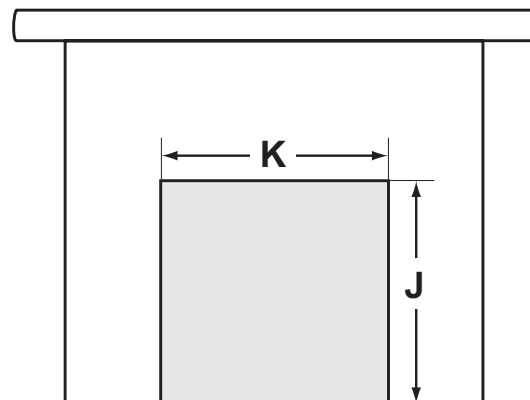


Figure 13 - Custom Cabinet

WARNING

The fireplace must be installed giving full consideration to the clearance and height requirements identified in this manual.

1. Bend out the nailing flanges located on each side of the firebox.
2. Slide the firebox into prepared framing or position firebox in its final position and frame later.
3. Level the firebox by checking the top edge of the firebox. Shim if necessary.
4. Anchor firebox to the side framing members using 8d nails or other suitable fasteners. *Refer to Figure 14.*
5. The canopy must be installed for safe operation of the heater. Refer to page 12 for canopy installation details.

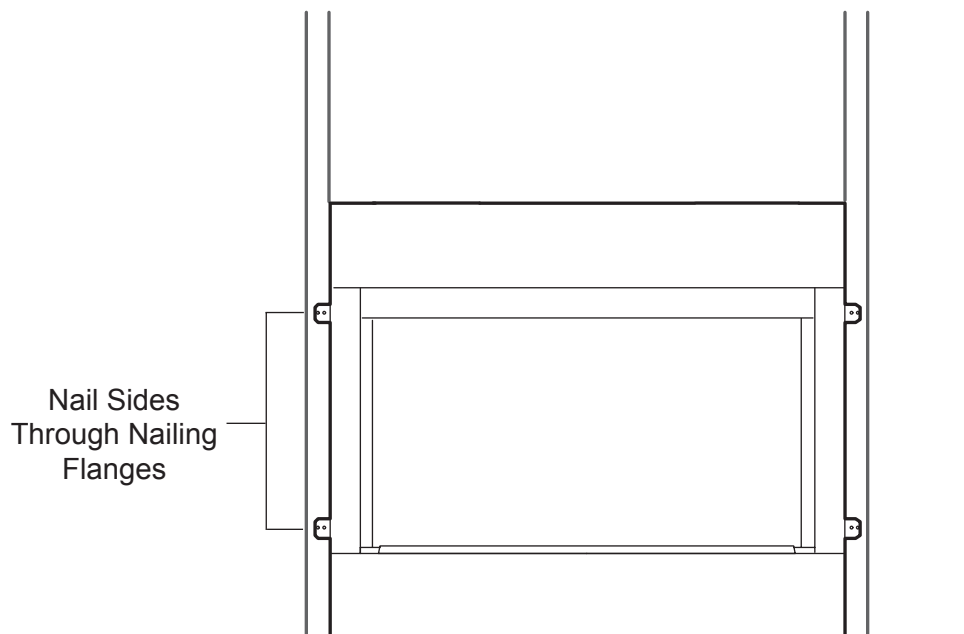


Figure 14 - Location of Nailing Flanges

CONNECTING THE GAS

NOTICE: A qualified gas appliance installer must connect the heater to the gas supply. Consult all local codes.

CAUTION

Use new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Code, section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (Listed on Data Plate) at the maximum flow rate (BTU/Hr). Undue pressure loss will occur if the pipe is too small.

A manual shutoff valve must be installed upstream of the appliance. Union tee and plugged $\frac{1}{8}$ " NPT pressure tapping point should be installed upstream of the appliance. See Figure 15.

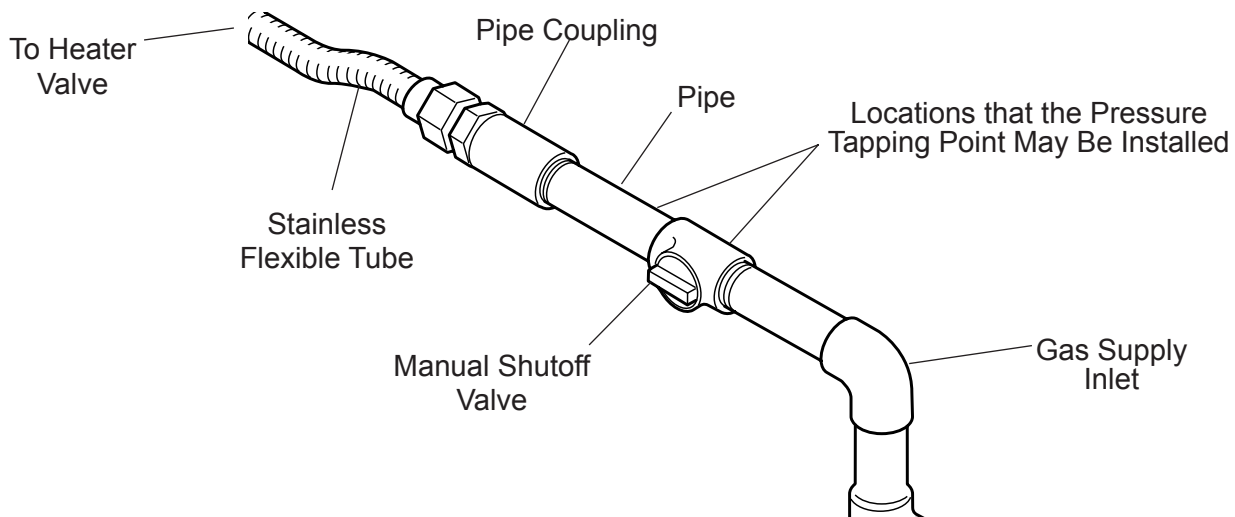


Figure 15 - Gas Connection

IMPORTANT: Hold heater valve firmly with a wrench to prevent movement when connecting to inlet pipe.

WARNING

CHECK GAS TYPE: The gas supply must be the same as stated on the heater's rating plate. If the gas supply is different, **DO NOT INSTALL THE HEATER**. Contact your dealer for the correct model.

Always use an external regulator for all propane/LPG heaters and high pressure one to two-pound systems only, to reduce the supply tank pressure to a maximum of 13" w.c. This is in addition to the internal regulator in the heater valve.

WARNING

Connecting directly to an unregulated propane/LPG tank can cause an explosion.

When tightening up the joint to the valve, hold the valve securely to prevent movement.

Test all gas joints from the gas meter to the heater valve for leaks using a gas analyzer or soap and water solution after completing connection. **DO NOT USE AN OPEN FLAME.**

Check the gas pressure with the appliance burning and the control set to **HIGH**.

MILLI-VOLT CONTROL (*Figure 16*)

The valve regulator controls the burner pressure which should be checked at the pressure test point.

Turn captured screw counter clockwise two or three turns and then place tubing to pressure gauge over test point (Use test point “OUT” closest to control knob). After taking pressure reading, be sure and turn captured screw clockwise firmly to re-seal. Do not over torque. Check for gas leaks.

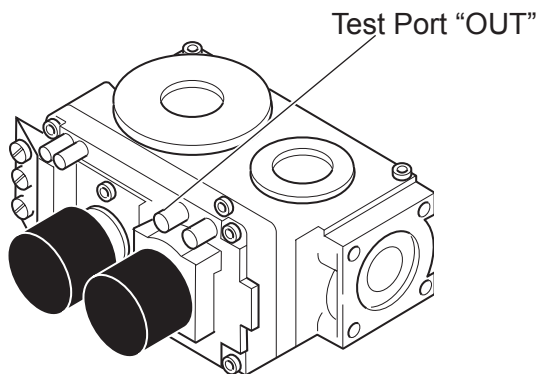


**Figure 16 - Pressure Test Point Location
Milli-Volt Control**

ELECTRICAL WIRING

The milli-volt valve is a self-powered combination gas control **THAT DOES NOT REQUIRE 110 VAC TO OPERATE.**

WARNING

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

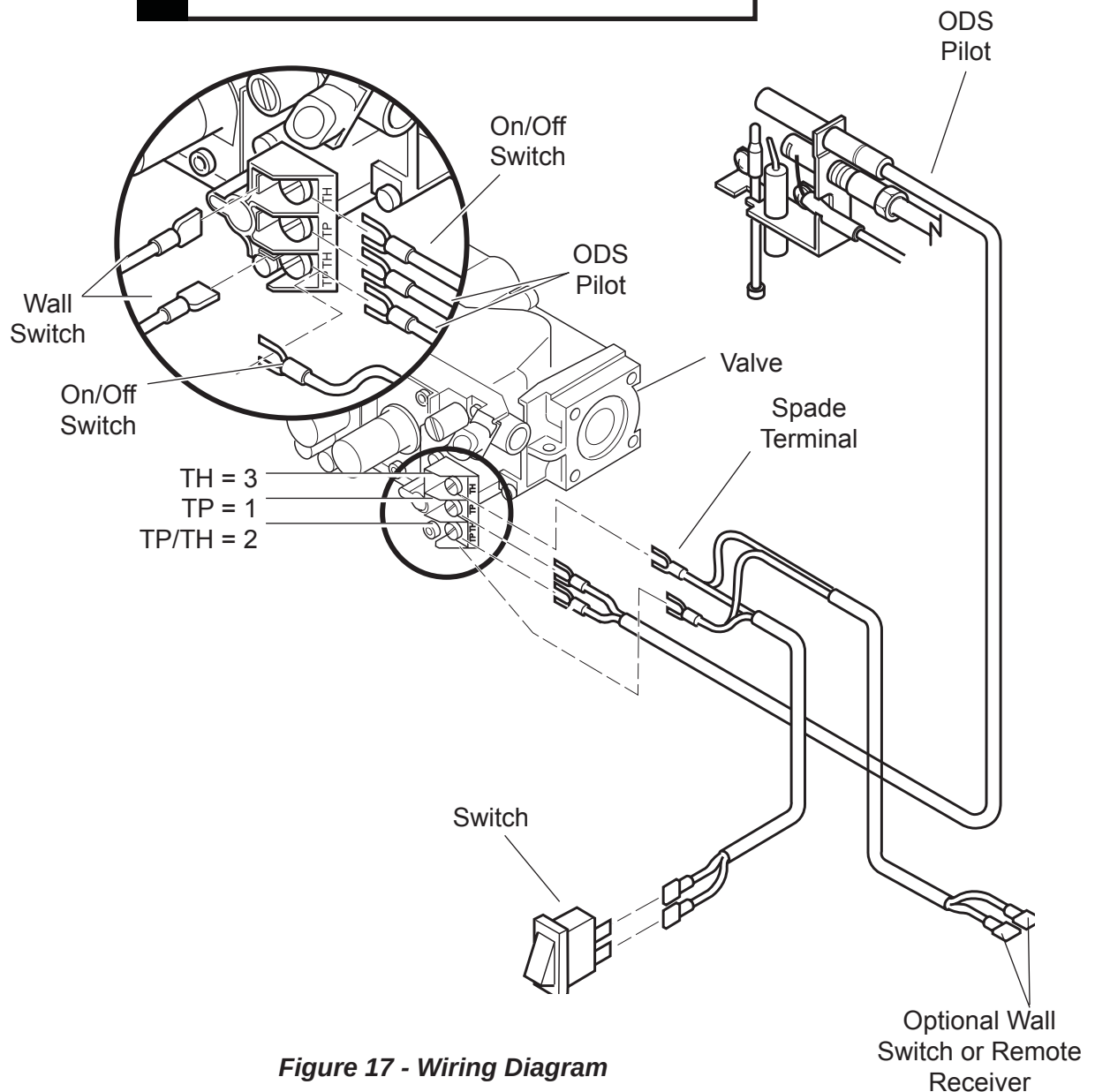


Figure 17 - Wiring Diagram

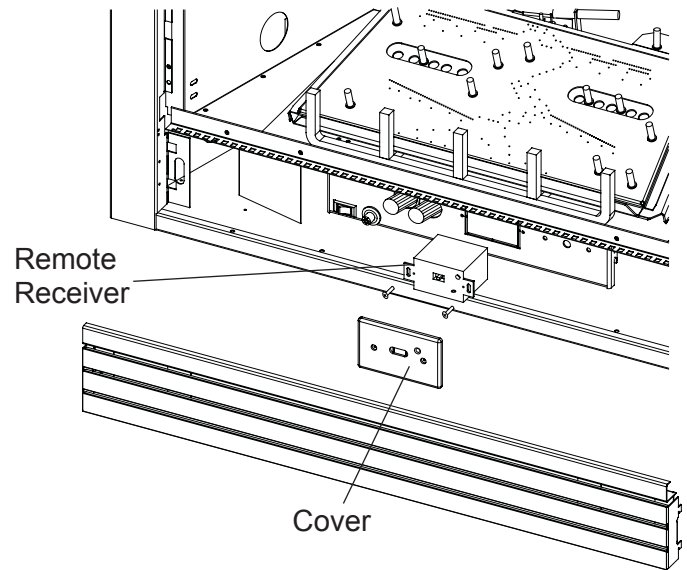
CONNECTING OPTIONAL WALL SWITCH

1. Use 18 awg, two-wire cable, 15 feet maximum length.
2. At one end of the cable, connect both wires to the wall switch or thermostat. At the other end, connect one wire to TP/TH and one wire to TH, or connect the wall switch/thermostat to the two male (0.25") terminals on the left side of the unit. The color of the wires does not matter.

CONNECTING REMOTE RECEIVER

THESE INSTRUCTIONS SUPERCEDE THE SECTION ENTITLED "HEARTH MOUNT" IN THE MILLI-VOLT HAND-HELD REMOTE INSTRUCTIONS SUPPLIED WITH THE REMOTE.

1. Remove cover on control panel to show opening for remote receiver. See Figure 18.
2. Connect the remote connectors located in the unit.
3. Slide remote receiver in the opening of control panel. Use two screws provided to attach remote receiver to the control panel. See Figure 18.
4. Replace Cover.



NOTE: Do not place remote in combustion chamber.

Figure 18 - Installing Remote Receiver

CHECKING SYSTEM OPERATION

The milli-volt system and individual components may be checked with a milli-volt meter having a 0-1000 mV range. Conduct each check shown in chart below by connection meter test leads to terminals as indicated.

CHECK TEST	TO TEST	CONNECT METER LEADS TO TERMINALS	SWITCH OR THERMOSTAT CONTACTS	METER READING SHOULD BE
A	COMPLETE SYSTEM	2 & 3	CLOSED	CLOSED
B	THERMOPILE OUTPUT	1 & 2	OPEN	OPEN

A. COMPLETE MILLI-VOLT SYSTEM CHECK

("A" Reading - Thermostat contacts CLOSED - Control Knob "ON" - Main burner should turn ON)

- a. If the reading is more than 100 milli-volts and the automatic valve still does not come on, replace the control.
- b. If the closed circuit reading ("A" reading) is less than 100 millivolts, determine cause for low reading, proceed to Section B below.

B. Thermopile Output Reading Check

("B" Reading - Thermostat contacts OPEN - Main burner OFF)

1. Check gas pressure to the unit. If gas pressure is within minimum and maximum on data plate, then check pilot voltage, 325 millivolts minimum. If the minimum milli-volt reading is not obtainable, replace pilot.

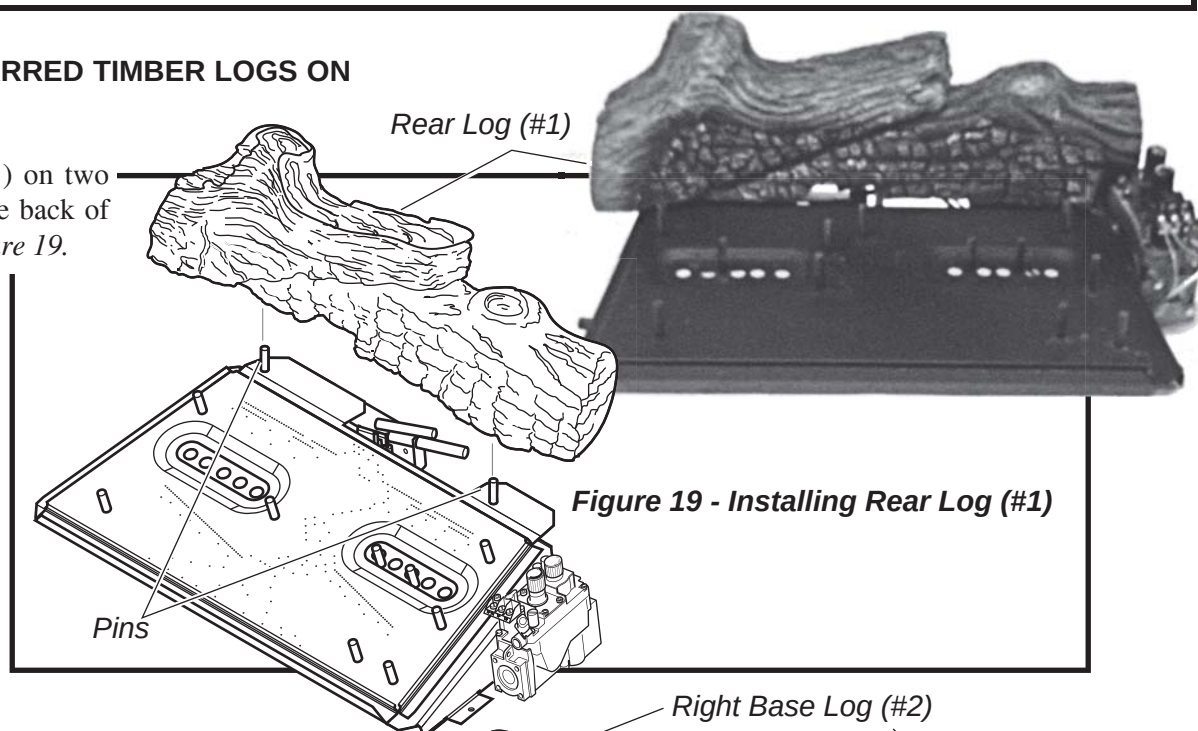
Before you begin — This unit is supplied with six (6) ceramic fiber logs. Do not handle these logs with your bare hands. **Always wear gloves to prevent skin irritation from ceramic fibers.** After handling the logs, wash your hands gently with soap and water to remove any traces of fibers.

WARNING

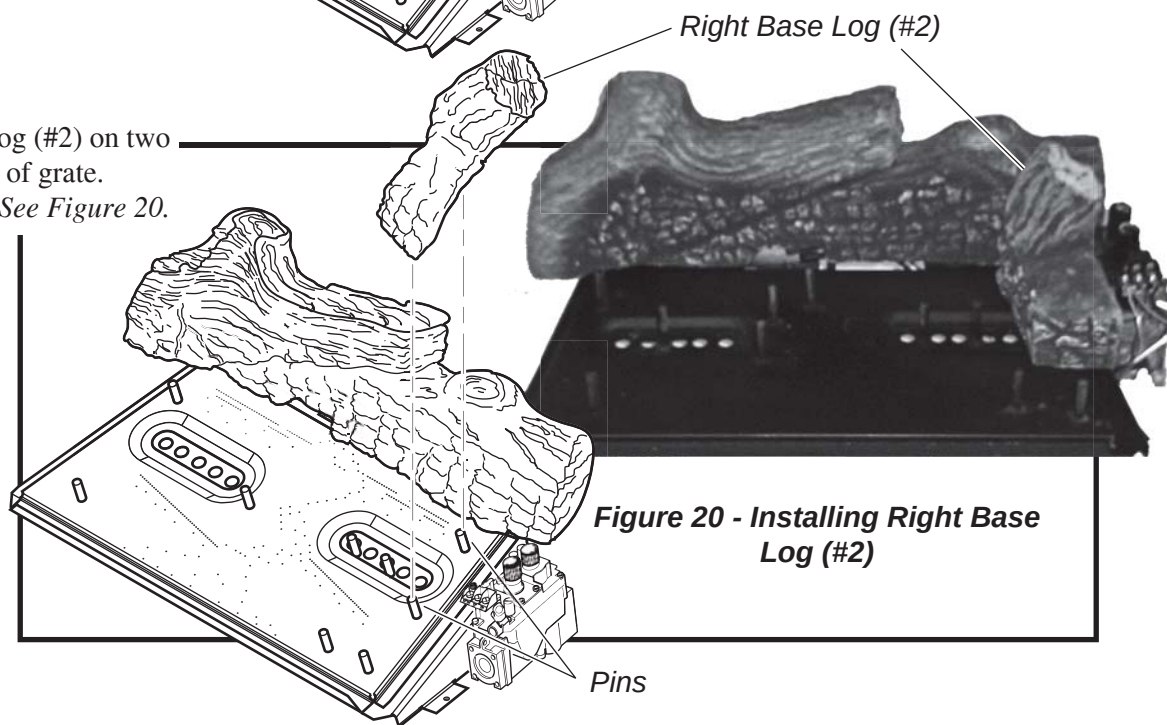
The positioning of the logs is critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance. Never add additional logs or embellishments such as pine cones, vermiculite or rock wool to the heater. Only use the logs and EB-RW (rock wool) supplied with the unit. Failure to position the parts in accordance with diagrams below or to use only parts specifically approved for this heater may result in property damage or personal injury.

INSTALLING CHARRED TIMBER LOGS ON BURNER

1. Place rear log (#1) on two located pins on the back of the grate. See Figure 19.



2. Place right base log (#2) on two pins on right side of grate. See Figure 20.



LOG PLACEMENT

3. Place left base log (#3) on two pins on left side of grate.
See Figure 21.

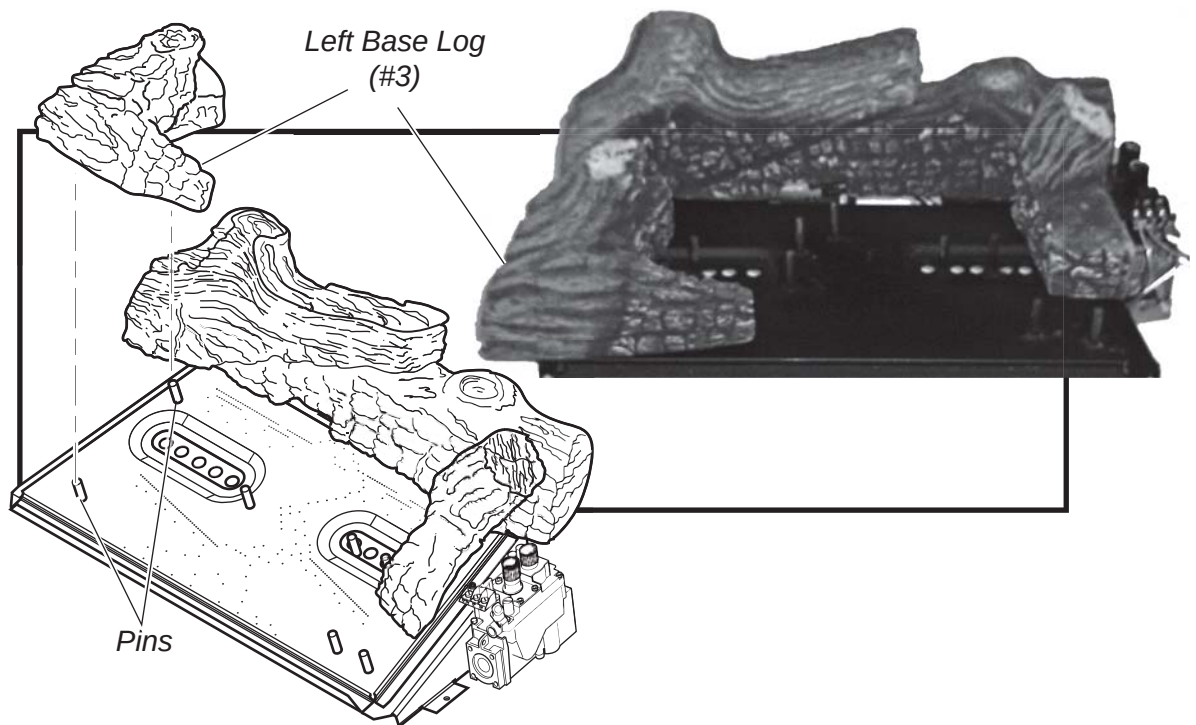


Figure 21 - Installing Left Base Log (#3)

4. Place right front log (#4) on two pins on bottom right side of grate.
See Figure 22.

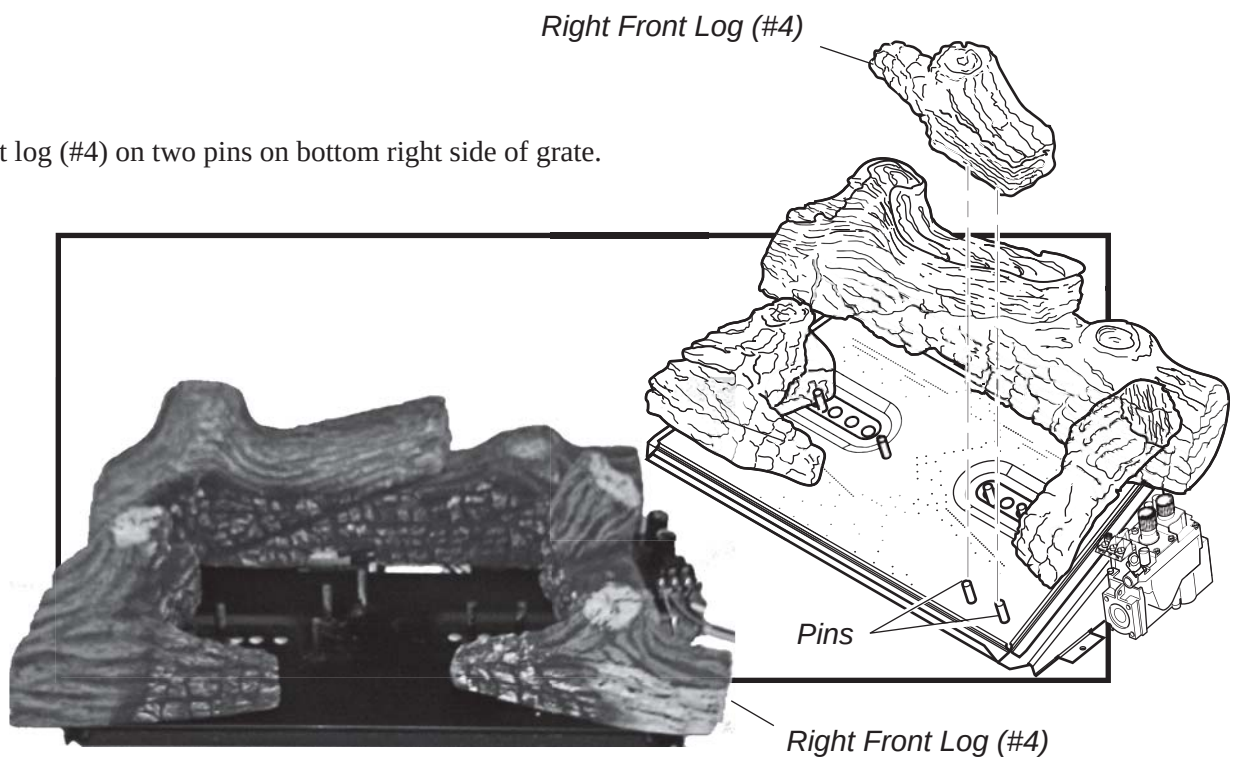


Figure 22 - Installing Right Front Log (#4)

5. Place right end of left top log (#5) on bottom center grate pin. Place left end of left top log (#5) on top of the left base log. See Figure 23.

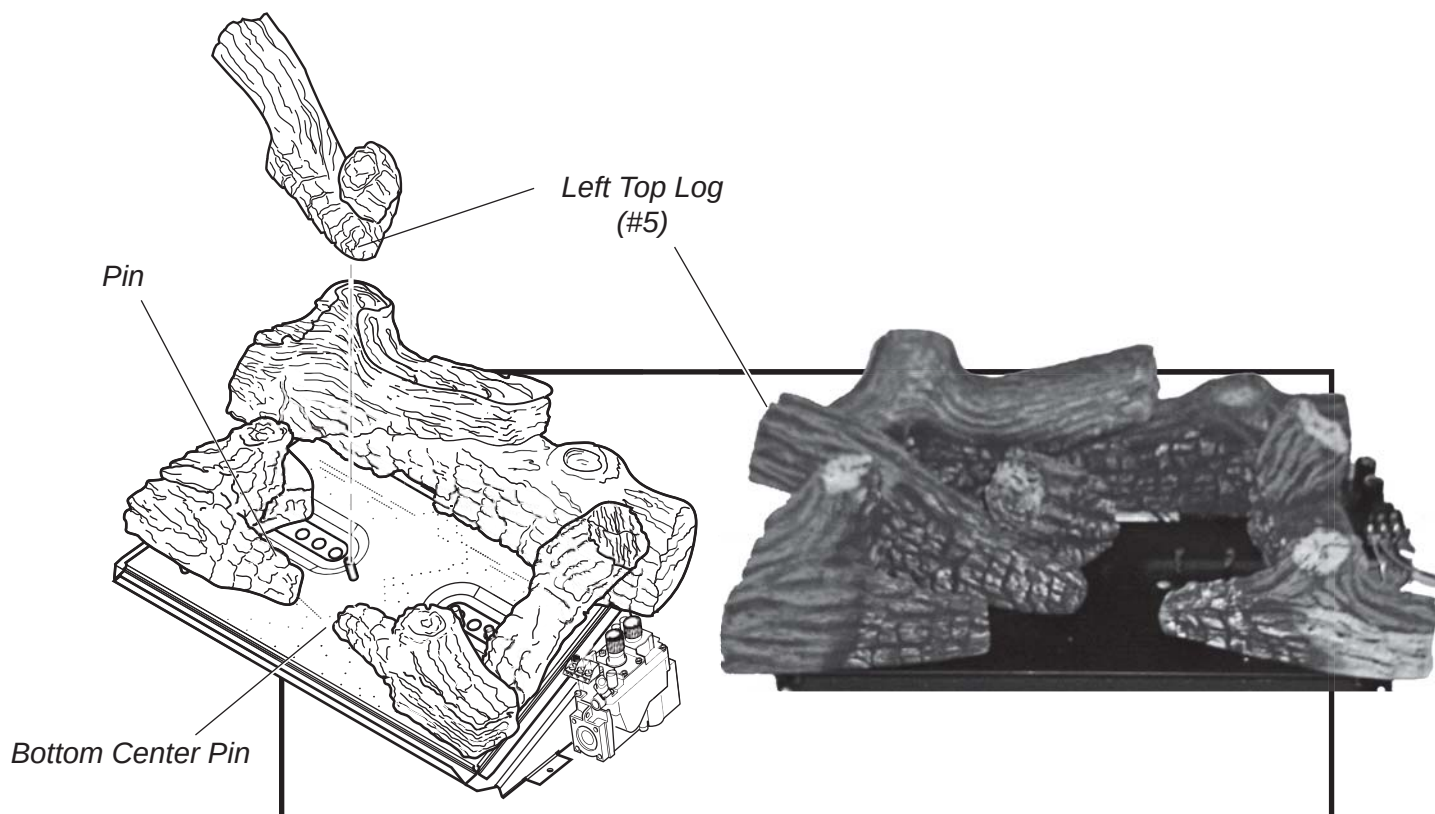


Figure 23 - Installing Left Top Log (#5)

LOG PLACEMENT

7. Place right top log (#6) on two pins to the left of right base log. See Figure 25.

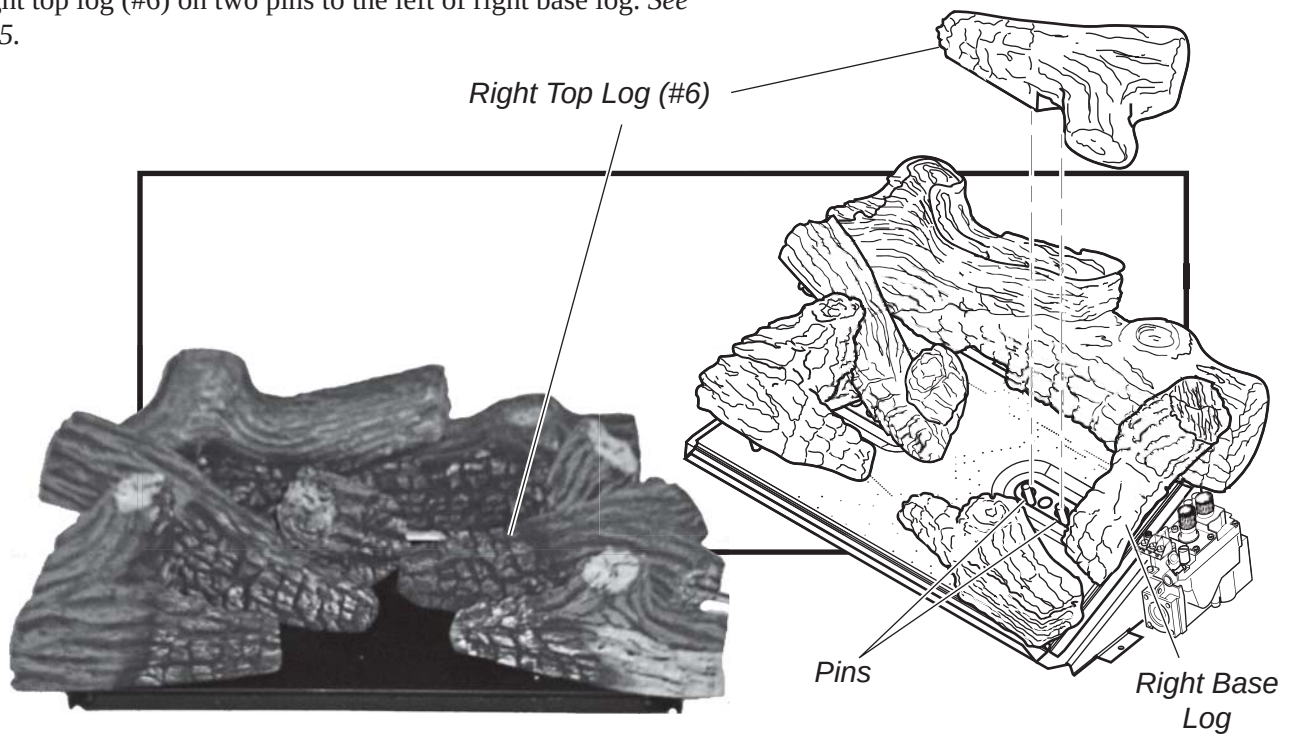


Figure 25 - Installing Right Top Log (#6)

PLACING ROCK WOOL

After installing logs, place TPB-RW (Rock Wool) in dime-size pieces evenly across the burner surface in between the logs. Do not add additional rock wool. See Figure 26 for the approximate area to place rock wool.

Wash hands after placing rock wool. Itching may occur.

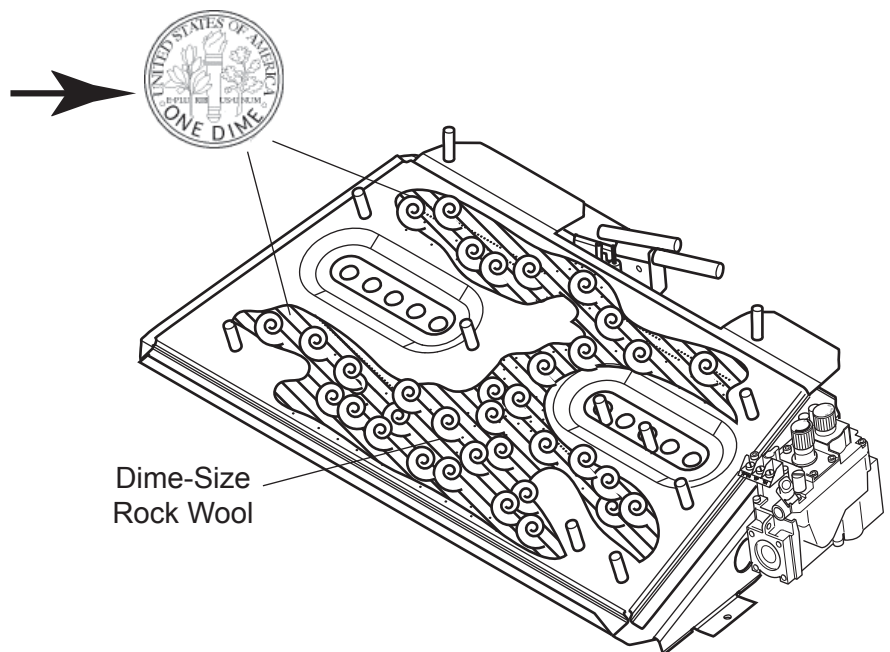


Figure 26 - Placing Rock Wool

WARNING

- Use only TPB-RW provided with log set.
- Do not add additional rock wool.

Flames from the pilot, front and rear burner should be visually checked as soon as the heater is installed. In addition, periodically check the flames visually during operation.

CHECKING THE PILOT FLAME

The pilot flame must always be present when the heater is in operation. It should just touch the top of the thermocouple tip for natural. See *Figure 27* for correct pilot flame.

If the pilot flame does not touch the thermocouple, then the main burner cannot function reliably. See *Figure 28* for incorrect shape of pilot flame.

MILLI-VOLT CONTROL

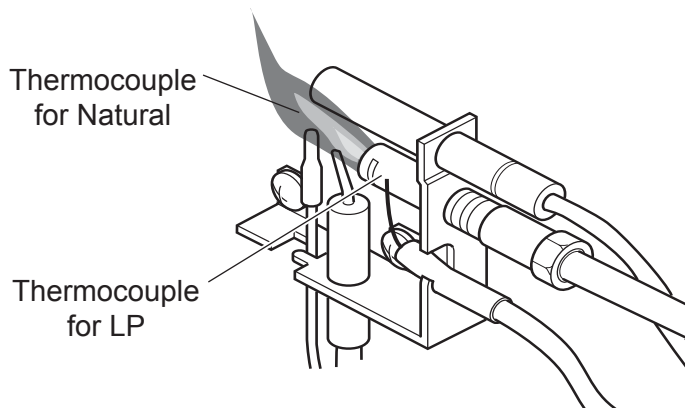


Figure 27 - Correct Appearance of Pilot Flame

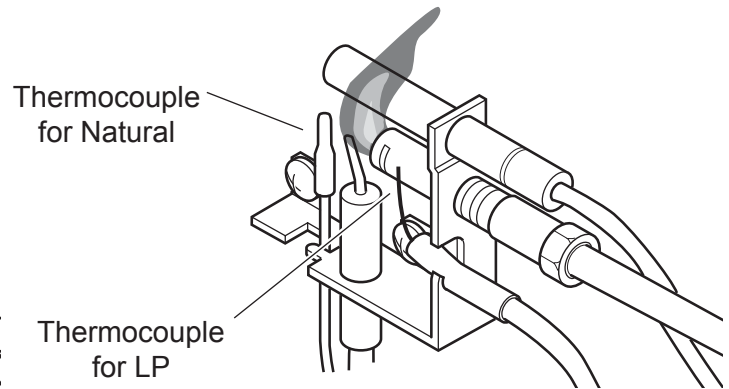


Figure 28 - Incorrect Appearance of Pilot Flame

CHECKING THE BURNER FLAME

In normal operation at full rate after 15 minutes, the following flame appearances should be observed:

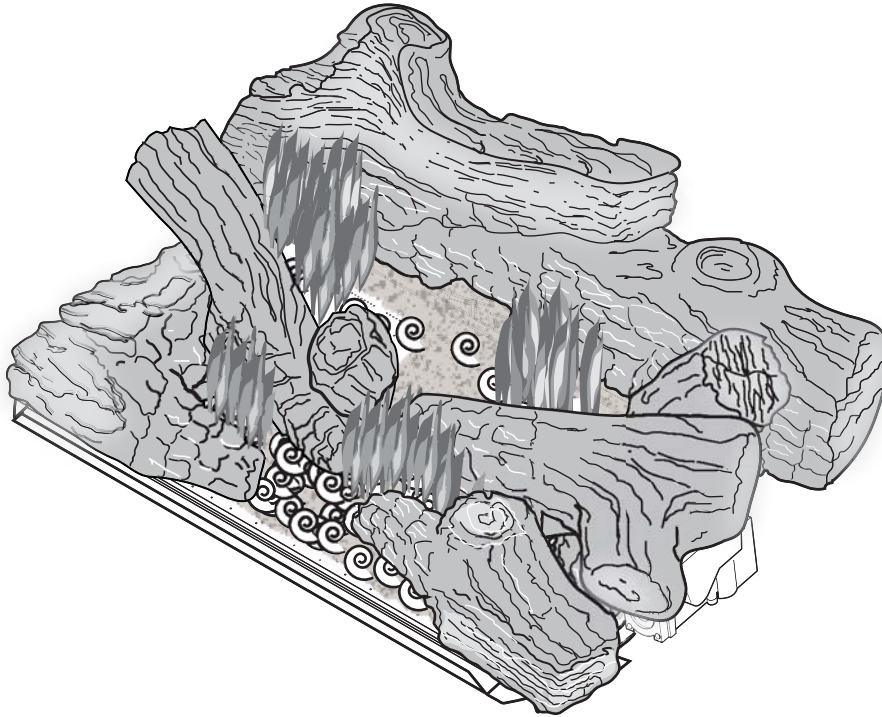


Figure 29 - Correct Appearance of Rear Flames of Charred Timber

Burner will have a random pattern of yellow flames as shown in *Figure 29*. There should be glowing embers on the front burner. **Note: The front flames and embers will be an opaque orange color during the burn off time.**

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING

If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the unit by hand.
- B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

- Do not attempt to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in, or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
 - D. Do not use this appliance if any part of it has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

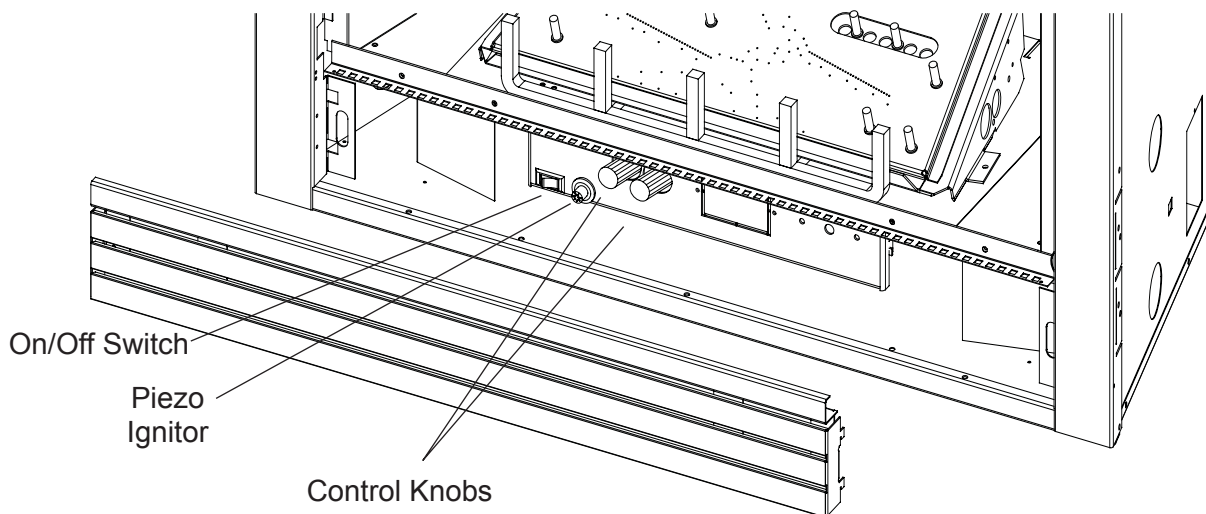


Figure 30 - Location of Piezo Ignitor, Control Knobs and Switch on Milli-Volt Unit

MILLI-VOLT CONTROL LIGHTING INSTRUCTIONS

1. STOP! Read the safety information label.
2. Make sure the manual shutoff valve is fully open.
3. This gas log set is equipped with an ignition device (piezo) which automatically lights the pilot. If piezo ignitor does not light the pilot, refer to instructions for "Match Lighting Instructions," page 29.
4. Turn gas control knob clockwise  to the OFF position, and turn ON/OFF switch to OFF position.
5. Wait (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "What to Do if You Smell Gas," page 27. If you don't smell gas, go to next step.
6. From OFF position, turn the gas control knob counterclockwise  to IGN position. Push in control knob for 5 seconds. **NOTE: If you are running the heater for the first time, it will be necessary to press in the control knob for 30 seconds to allow air to bleed out of the gas piping.**
7. With the control knob pushed in, push in and release the piezo ignitor button to light the pilot.
8. Continue pushing the control knob in for a further 60 seconds to prevent the flame detector from shutting off the gas while the probe is warming up. Release the control knob.
9. Turn gas control knob counterclockwise  to the ON position.
10. After the pilot has been lit for one minute, the burners can be turned on. Turn the ON/OFF switch to ON position or adjust thermostat to desired setting.
11. If the gas logs will not operate, follow the instructions "To Turn Off Gas To Heater" below and call your service technician or gas supplier.

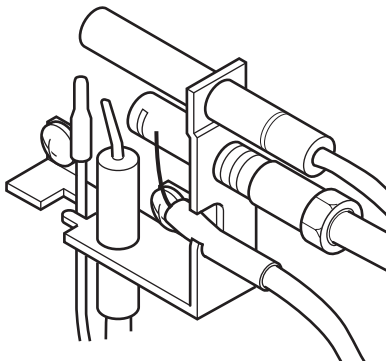


Figure 31 - Pilot

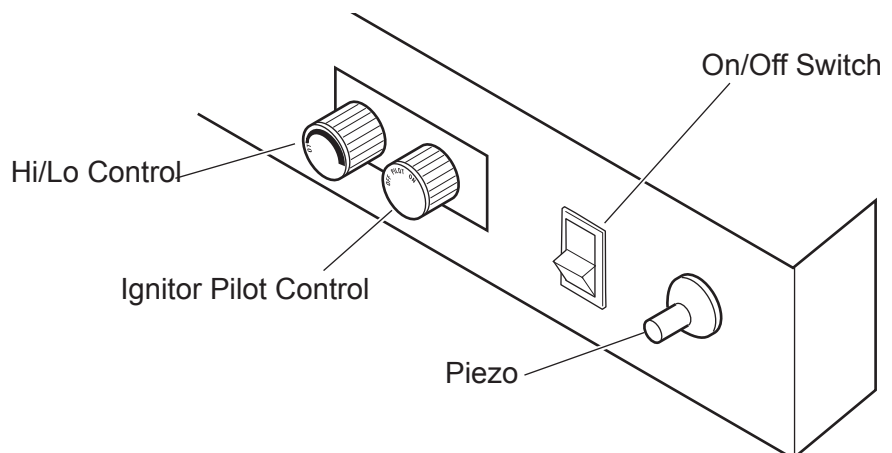


Figure 32 - Control Cover Plate for Milli-Volt

TO TURN OFF GAS TO HEATER

1. Turn control knob clockwise  to OFF position to completely shut off the heater.
2. If applicable: Turn ON/OFF switch to OFF position and/or set thermostat (if present) to lowest setting.
3. If applicable: Turn off all electric power to the heater.

MATCH LIGHTING INSTRUCTIONS

1. Remove any items necessary for easy access to the pilot (for example: logs, screens, etc.).
2. Follow appropriate lighting instructions found previously. Instead of pushing and releasing the piezo button, light a match and hold the flame to the end of the pilot and ignite the pilot.
3. After control knob has been released and pilot stays lit, reinstall any items that were removed for pilot access.
4. Call a qualified service technician for repair or replacement of the piezo ignitor.

CLEANING AND SERVICING

Annual inspection and cleaning by your dealer or qualified service technician is recommended to prevent malfunction and/or sooting.

WARNING

Turn off heater and allow to cool before cleaning. Disconnect electrical power before cleaning or servicing.

Remove logs, handling carefully by holding gently at each end. Gloves are recommended to prevent skin irritation from ceramic fibers. If skin becomes irritated, wash gently with soap and water. Refer to manual for correct log placement.

PERIODIC CLEANING - Refer to parts diagram for location of items discussed below.

- Do not use cleaning fluid to clean logs or any part of heater.
- Brush logs with soft bristle brush or vacuum with brush attachment.
- Vacuum loose particles and dust from the front and rear burner, control and piezo covers and grate weldment.
- Inspect and clean burner air intake holes. Remove lint or particles with vacuum, brush, or pipe cleaners. Failure to keep air intake holes clean will result in sooting and poor combustion.
- External case should be dusted and wiped with a wet soapy cloth.

ANNUAL CLEANING/INSPECTION - Refer to parts diagram for location of items discussed below.

- Inspect and clean burner air intake holes. Remove lint or particles with vacuum, brush or pipe cleaners. Failure to keep air intake holes clean will result in sooting and poor combustion.
- Inspect and clean all burner ports.
- Inspect ODS pilot for operation and accumulation of lint at air intake holes.
- Verify flame pattern and log placement for proper operation.
- Verify smooth and responsive ignition of main burner and rear burner.

BLOWER AND OTHER OPTIONAL EQUIPMENT

OPTIONAL EQUIPMENT

FORCED AIR KIT

If you are installing the forced air kit, Model BLOTMC, see the installation instructions provided with the kit for electrical wiring requirements, or the blower installation section. The firebox must be connected to main power supply at time of firebox installation. The blower must be installed prior to the installation of the unvented heater. The electrical connections must be made before the firebox is framed and enclosed in the finished walls.

OPTIONAL TRIM

Optional brass or pewter trim kits can be used in place of the factory supplied black trim.

OPTIONAL BRICK

Optional Cottage Clay and Cottage Red firebrick kits can be installed. Refer to installation instructions provided with kit.

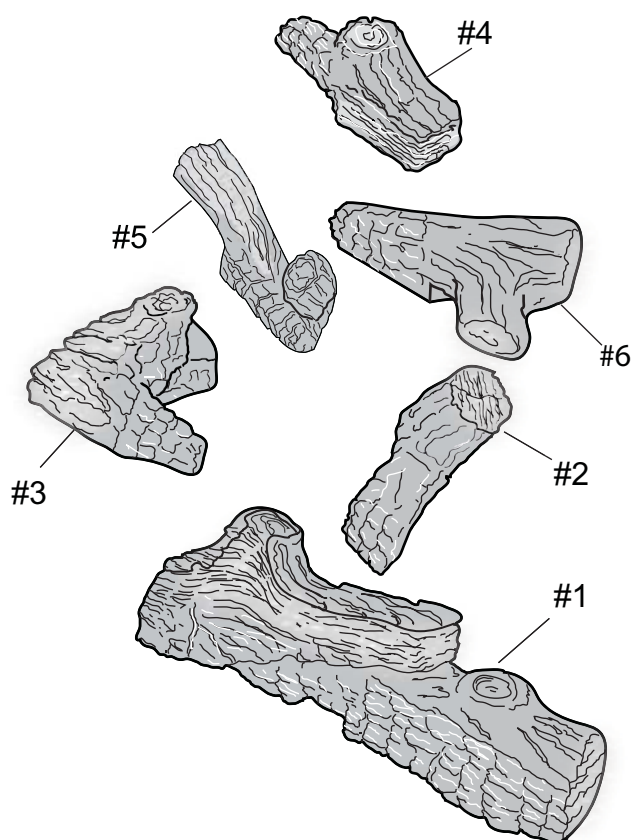
WARNING

Electrical connections should only be performed by a qualified, licensed electrician, main power must be off when connecting to main electrical power supply or performing service.

REPLACEMENT PARTS ARE AVAILABLE THROUGH YOUR RETAILER.

CHARRED TIMBER LOGS

Item	Description	Qty	24
1	Rear Log	1	70D0031
2	Right Base Log	1	70D0032
3	Left Front Base Log	1	70D0033
4	Right Front Log	1	70D0037
5	Left Top Log	1	70D0065
6	Right Top Log	1	70D0034



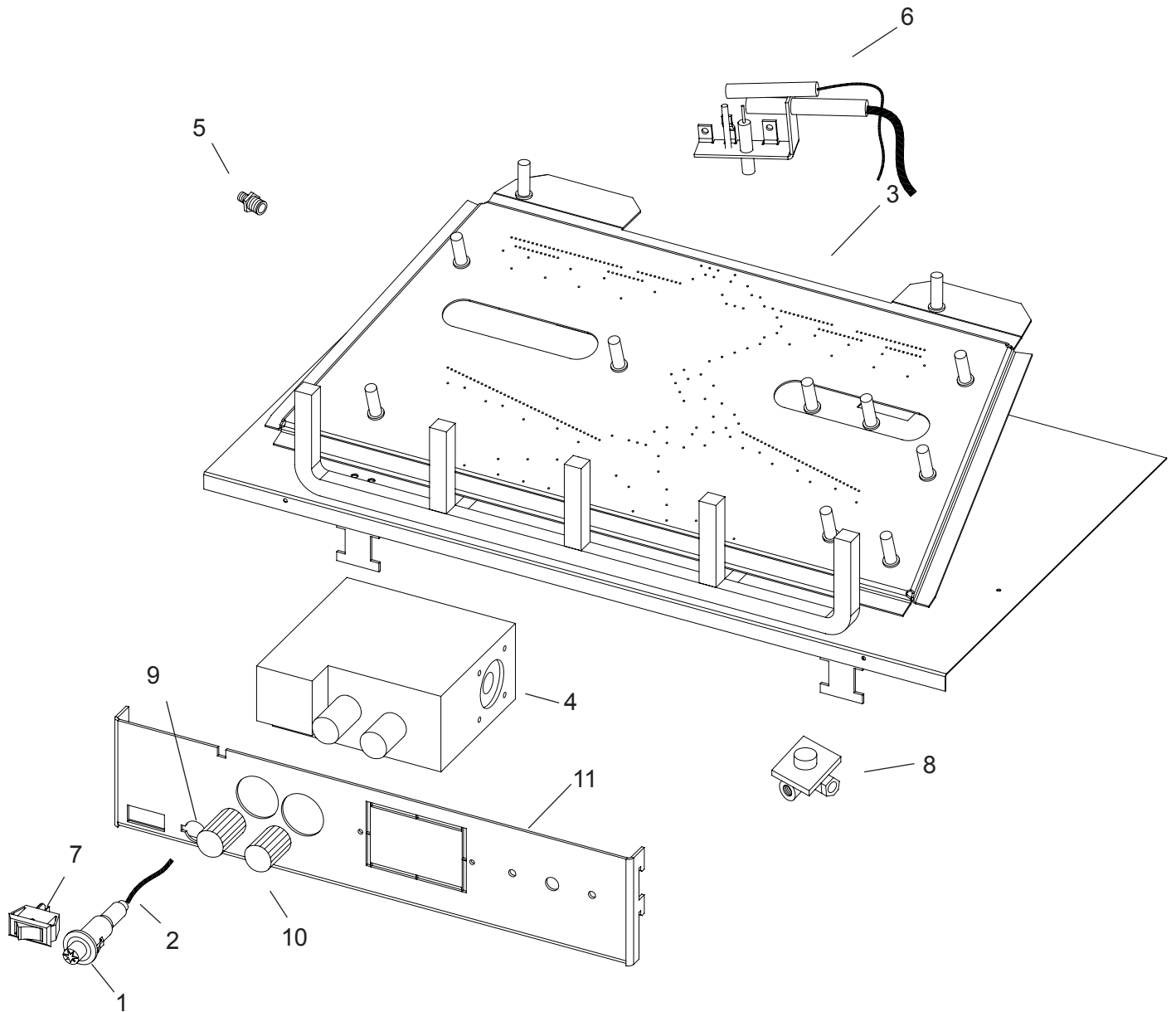
WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

ILLUSTRATED PARTS BREAKDOWN

WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this heater may result in property damage or personal injury.



REPLACEMENT PARTS LIST

REPLACEMENT PARTS ARE AVAILABLE THROUGH YOUR RETAILER.

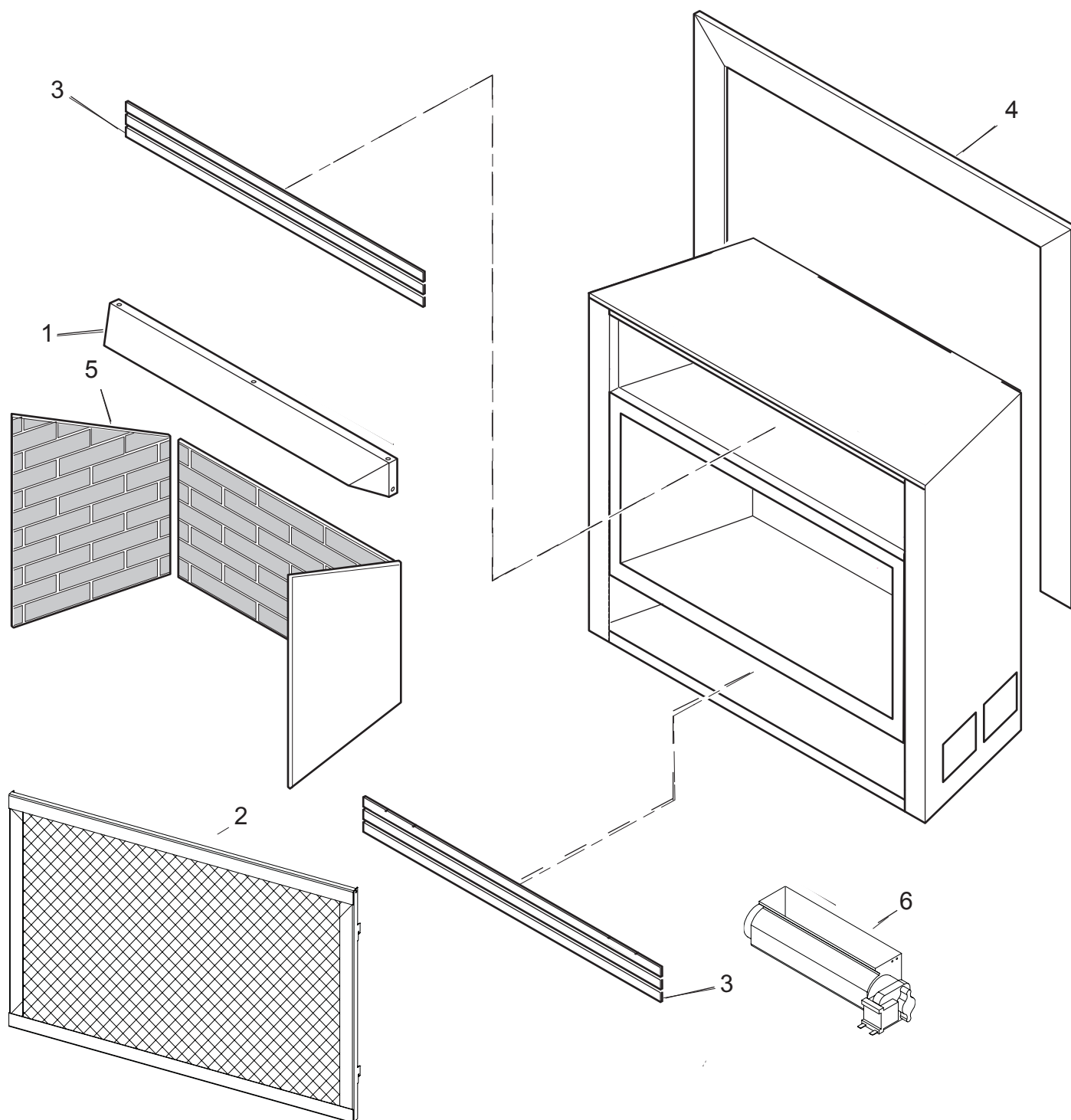
BURNER ASSEMBLY

Item		Qty	TPB24	
			Natural	Propane
1	Piezo Ignitor	1	14D0503	14D0503
2	Piezo Wire	1	00K0632	00K0632
3	Burner	1	70D0010	70D0010
4	Control Valve	1	14D0467	14D0468
5	Injector	1	70D0064	57D0680
6	ODS Pilot Assembly	1	14D0473	14D0477
7	On/Off Switch	1	32D0232	32D0232
8	Pilot Regulator	1	14D0469	—
9	Hi/Lo Knob	1	37D0011	37D0011
10	Pilot On/Off Knob	1	37D0010	37D0010
11	Control panel	1	54D0233	54D0233

ACCESSORIES SOLD SEPARATELY

Description	Part Number
Wall Thermostat Kit	WT
Remote (On/Off)	RCB, RCM, WMTD
Thermostat Remote	RCST, RCT, WWTD
Remote Receiver Cover Ember	RRCE
Remote Receiver Cover Metal	RRCM
Remote Touch Light (On/Off)	TLM
Remote Touch Light T-stat	TLT
Cast Iron Gate and Andirons	CIGA (do not fit DFS32)
Rock Wool Bag	TPB24-RW

ILLUSTRATED PARTS BREAKDOWN



WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

REPLACEMENT PARTS LIST

REPLACEMENT PARTS ARE AVAILABLE THROUGH YOUR RETAILER.

			DFS32C	DFS36C	DFS42C
Item	Description	Qty			
Standard Features					
1	Canopy	1	71D0023	71D0500	71D1000
2	Screen Assembly	1	71D0075	71D0545	71D1026
4	Black Trim Kit	1	BLMTK32C	BLMTK36C	BLMTK42C
Feature Options					
3	Brass Louver Kit	1	L32BR	L36BR	L42BR
3	Pewter Louver Kit	1	L32PW	L36PW	L42PW
3	Black Louver	6	26D0695	26D0697	26D0699
7	Blower with Rheostat	1	BLOTMC	BLOTMC	BLOTMC
Accessories					
4	Curved Design Brass Trim	1	BRTK32C	BRTK36C	BRTK42C
4	Curved Design Pewter Trim	1	PWTK32C	PWTK36C	PWTK42C
4	Curved Design Black Trim	1	BLTK32C	BLTK36C	BLTK42C
4	Brass Trim Kit	1	BRMTK32C	BRMTK36C	BRMTK42C
4	Pewter Trim Kit	1	PWMTK32C	PWMTK36C	PWMTK42C
5	Cottage Red Firebrick	1	FB32CR	FB36CR	FB42CR

TROUBLESHOOTING

WARNING

Turn appliance OFF and allow to cool before servicing. Only a qualified service person should service and repair the heater.

Note: All troubleshooting items are listed in order of operation.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot.	1. Ignitor electrode positioned wrong. 2. Ignitor electrode is broken. 3. Ignitor electrode not connected to ignitor cable. 4. Ignitor cable pinched or wet. Keep ignitor cable dry. 5. Broken ignitor cable. 6. Bad piezo ignitor.	1. Replace ignitor. 2. Replace ignitor. 3. Reconnect ignitor cable. 4. Free ignitor cable if pinched by any metal or tubing. 5. Replace ignitor cable. 6. Replace piezo ignitor.
Appliance produces unwanted odors.	1. Appliance burning vapors from paint, hair spray, glues, etc. 2. Gas leak. 3. Initial burn off.	1. Ventilate room. Stop using odor causing products while heater is running. 2. Locate and correct all leaks. 3. Ventilate room and turn unit on high until odor is gone. Odor should be gone after 6 hours of continuous use.
Appliance shuts off during use.	1. Not enough fresh air is available for ODS/pilot to operate. 2. Low line pressure. 3. ODS/pilot is partially clogged. 4. Defective Thermopile. 5. Restrictions in incoming air flow.	1. Open window and/or door for ventilation. 2. Contact local gas company. 3. Clean ODS/pilot. 4. Check pilot flame, check wire connections, check output, should be 325 millivolts across TH/TP and TP Terminals with ON/OFF switches off. 5. Check for bottom riser on glass door, sunken fireplace, excessive lava rock/cinders densely packed against grate.
Gas odor even when control knob is in OFF position.	1. Gas leak. 2. Control valve defective.	1. Locate and correct all leaks. 2. Replace control valve.
When ignitor button is pressed, there is spark at ODS pilot, but no ignition.	1. Gas supply turned off or manual shutoff valve closed. 2. Control knob not in PILOT position. 3. Control knob not pressed in while in PILOT position. 4. Air in gas lines when installed. 5. ODS/pilot is clogged. 6. Gas regulator setting is not correct.	1. Turn on gas supply or open manual shutoff valve. 2. Turn control knob to PILOT position. 3. Press in control knob while in PILOT position. 4. Continue holding down control knob. Repeat igniting operation until air is removed. 5. Replace ODS/pilot assembly or get it serviced. 6. Replace gas regulator.

WARNING

If the gas quality is bad, your pilot may not stay lit, the burners may produce soot and the heater may backfire when lit. If the gas quality or pressure is low, contact your local gas supplier immediately.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
ODS/pilot lights, but flame goes out when control knob is released.	1. Control knob not fully pressed in. 2. Control knob not pressed in long enough. 3. Manual shutoff valve not fully open. 4. Thermocouple connection loose at control valve. 5. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by either low gas pressure, or a dirty or partially clogged ODS/pilot. 6. Thermocouple damaged. 7. Control valve damaged.	1. Press in control knob fully. 2. After ODS/pilot lights, keep control knob pressed in for 30 seconds. 3. Fully open manual shutoff valve. 4. Hand tighten thermocouple connection until snug, then tighten 1/4 turn more. 5a. Contact local gas company. 5b. Clean pilot with vacuum cleaner. 6. Replace thermocouple. 7. Replace control valve.
Burner does not light after ODS/pilot is lit.	1. Burner orifice is clogged. 2. Burner orifice diameter is too small. 3. Inlet gas pressure is too low.	1. Clean orifice. 2. Replace burner orifice. 3. Contact qualified service person.
Burner backfires during combustion.	1. Manifold pressure is too low. 2. Burner orifice is clogged.	1. Contact local gas company. 2. Clean burner or replace burner orifice.
Slight smoke or odor during initial operation.	1. Burner orifice is clogged or damaged. 2. Burner is damaged. 3. Gas regulator defective.	1. Clean burner or replace burner orifice. 2. Replace burner. 3. Replace gas regulator.
Logs appear to smoke after initial operation.	1. Vapors from paint or curing process of logs. 2. Vapors or smoke continue after heater has run with damper or window open for several hours.	1. Problem will stop after a few hours of operation. Run the heater with the damper open if you have one, or open a window for the first few hours. 2. Log heater is intended to be smokeless. Turn OFF heater and call qualified service person.
Heater produces a whistling noise when burner is lit.	1. Turning control knob to HIGH position when burner is cold. 2. Air in gas line. 3. Dirty or partially clogged burner orifices.	1. Turn control knob to LOW position and let warm up for a minute. 2. Operate burner until air is removed from line. Have gas line checked by local gas company. 3. Clean burner or replace burner orifice.
No gas to pilot.	1. LP-regulator shut down due to inlet pressure too high.	1. Verify LP tank regulator is installed and set at 11" to 13" w.c. 2. Replace regulator on heater.

TRIM INSTALLATION

1. Remove top and bottom louver assemblies by disengaging hooks. Pull assemblies up and away from unit.
See Figure 33.
2. Remove canopy by removing screws and pulling canopy away from unit. *See Figure 34.*
3. Set bottom trim kit piece in place on bottom of face. Bottom piece will be held in place by the side pieces.
See Figure 34.

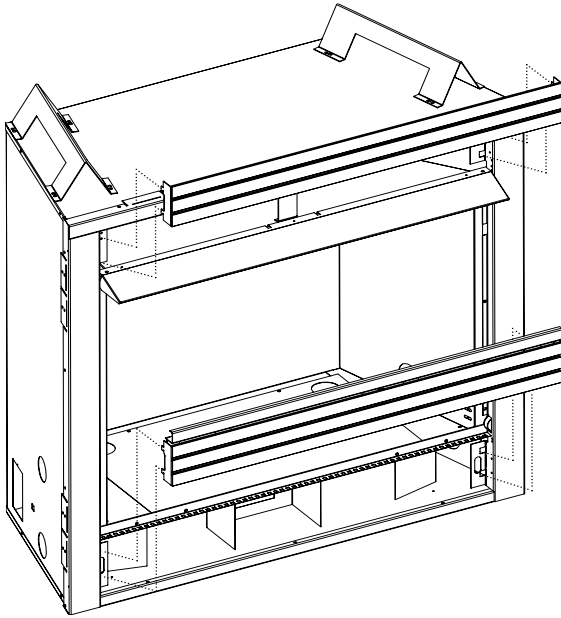


Figure 33

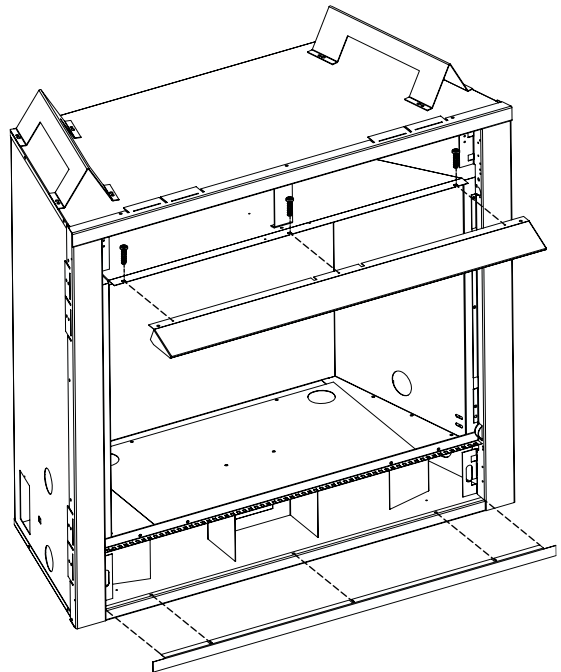


Figure 34

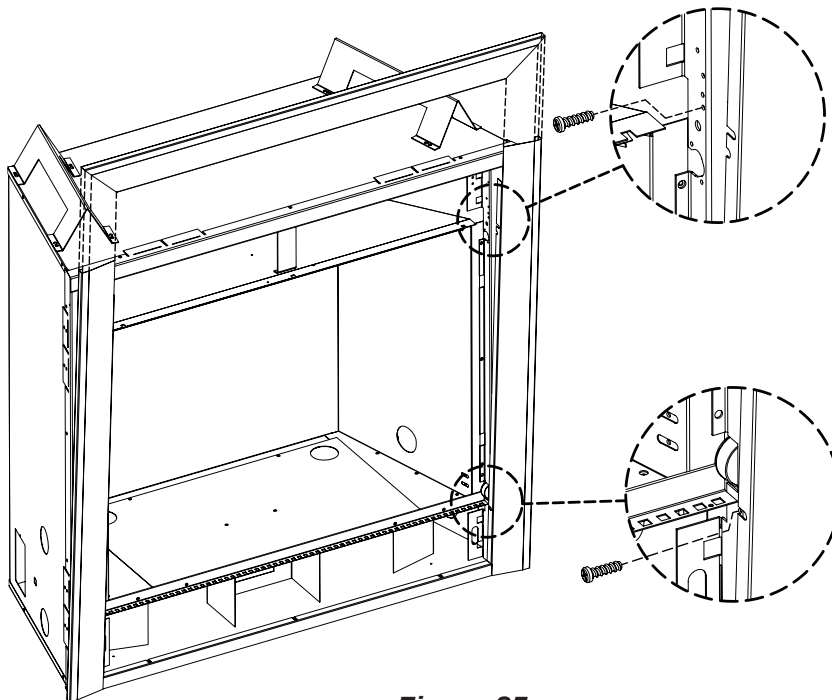


Figure 35

4. Loosely install four supplied screws into left and right sides of unit face. Leave approximately 1/8th in. of screw shaft protruding from unit in each location. *See Figure 35.*
5. Set left and right side piece of trim kit in place on unit. Lean the top of each piece away from the unit and towards you in order to install top trim kit piece. Top piece should fit with sides as shown.
See Figures 36, 37 & 38

6. Hold trim kit together by gripping the top left and right corners. Tilt trim kit away from you and into place snugly against unit. Tighten screws installed in step 4.

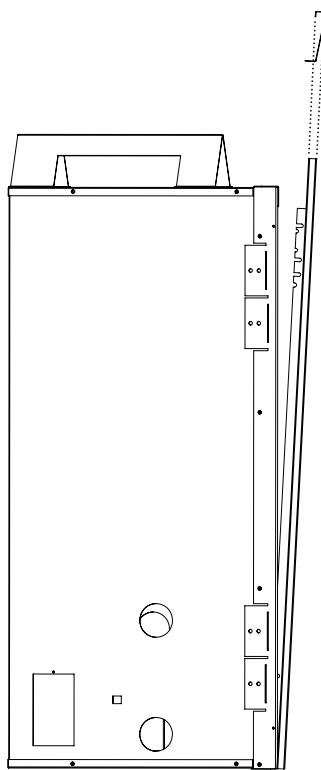


Figure 36

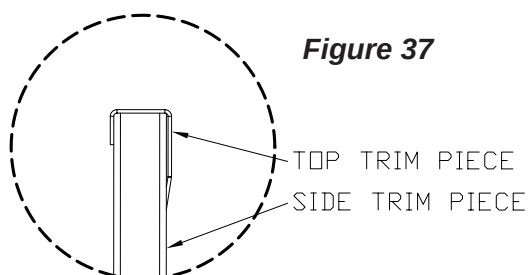


Figure 37

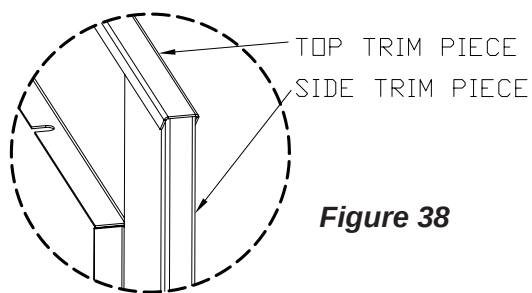


Figure 38

7. Secure the top trim piece to unit by installing supplied screws. *See Figure 39.*
8. Secure canopy back in place on unit.

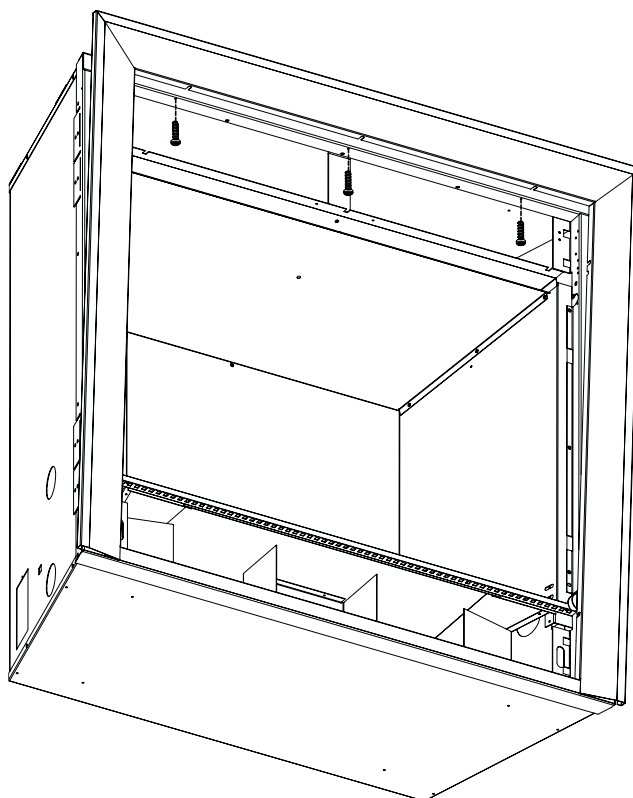


Figure 39

MONESSEN HEARTH SYSTEMS

LIMITED LIFETIME WARRANTY POLICY

The following components are warranted for life to the original owner, subject of proof of purchase: Firebox, Combustion Chamber, Heat Exchanger, Grate, and Stainless Steel Burners.

FIVE YEAR WARRANTY

The following components are warranted for 5 years to the original owner, subject of proof of purchase: Vent Free Ceramic Fiber Logs, Catalytic Filter and Aluminized Burners.

BASIC WARRANTY

Monessen Hearth Systems (MHS) warrants the components and materials in your gas appliance to be free from manufacturing and material defects for a period of two years from date of installation. After installation, if any of the components manufactured by MHS in the appliance are found to be defective in materials or workmanship, MHS will, at its option, replace or repair the defective components at no charge to the original owner. MHS will also pay for reasonable labor costs incurred in replacing or repairing such components for a period of two years from the date of installation. Any products presented for warranty repair must be accompanied by a dated proof of purchase.

This Limited Lifetime Warranty will be void if the appliance is not installed by a qualified installer in accordance with the installation instructions. The Limited Lifetime Warranty will also be void if the appliance is not operated and maintained according to the operating instructions supplied with the appliance, and does not extend to (1) firebox/burner assembly damage by accident, neglect, misuse, abuse, alteration, negligence of others, including the installation thereof by unqualified installers, (2) the costs of removal, reinstallation or transportation of defective parts on the appliance, or (3) incidental or consequential damage. All service work must be performed by an authorized service representative.

This warranty is expressly in lieu of other warranties, express or implied, including the warranty of merchantability of fitness for purpose and of all other obligations or liabilities. Monessen Hearth Systems, Inc. does not assume for it any other obligations or liability in connection with the sale or use of the appliance. In states that do not allow limitations on how long an implied warranty lasts, or do not allow exclusion of indirect damage, those limitations of exclusions may not apply to you. You may also have additional rights not covered in this Limited Lifetime Warranty.

MHS reserves the right to investigate any and all claims against the Limited Lifetime Warranty and decide upon method of settlement.

For information about this warranty, contact:

**Technical Services
Monessen Hearth Systems
149 Cleveland Drive
Paris, Kentucky 40361**